

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



U.S. Department of Agriculture

1984 BUDGET EXPLANATORY NOTES FOR COMMITTEE ON APPROPRIATIONS

FOREST SERVICE

TABLE OF CONTENTS

Forest Service Mission	1
Organization	2
Highlights of 1984 Request	7
Summary of Receipts	11
1984 Statement of Expenditures and Receipts	12
Three Year Summary of Appropriations	13
Forest Research	14
State and Private Forestry	74
Forest Pest Management	78
Fire Protection	83
Forest Management and Utilization	87
Special Projects	93
National Forest System	98
Minerals Area Management	109
Land Management	116
Land Line Location	121
Maintenance of Facilities	123
Forest Fire Protection	124
Fighting Forest Fires	131
Cooperative Law Enforcement	132
Road Maintenance	133
Trail Maintenance	136
Timber Sales Administration and Management	138
Reforestation and Stand Improvement	148
Recreation Use	153
Wildlife and Fish Habitat Management	160
Range Management	166
Soil, Water and Air Management	172
General Administration	181
Construction	205
Construction of Facilities	207
Road Construction	211
Trail Construction	221
Research Construction (Project Listing)	223
Construction for Fire, Administration and Other (Project Listing)	224
Recreation Use Construction (Project Listing)	228
Land Acquisition	233
L&WCF	235
Weeks Act	235

Other Appropriations	238
Acquisition of Lands for National Forests (Special Acts)	238
Acquisition of Lands to Complete Land Exchanges	240
Range Betterment Fund	241
Working Capital Fund	242
Youth Conservation Corps	243
Appropriated Trust Fund	244
Permanent Appropriations (Working Funds)	254
Permanent Appropriations (Payment Funds)	262
Trust Funds	267
Reforestation Trust Fund	272
Human Resource Programs	276
Language Change Proposals	284
Administrative Provisions	288
Special Exhibits	291
Detail of Permanent Positions	291
Calculation of 1984 Base	292
Changes in Full-time Equivalents by Occupational Categories	293
USDA Pest Management: Gypsy Moth, Tussock Moth and Southern Pine Beetle ..	294

FOREST SERVICE MISSION

The Forest Service has overall national leadership and responsibility for forestry. The primary purpose of Forest Service programs is to achieve proper management and use of the Nation's forests, rangelands and related research. The outputs from these lands include wood and paper products, oil, gas and other minerals, red meat, fish, wildlife, water, and a high quality environment for outdoor recreation and wilderness. All of these outputs are essential to the social and economic well being of the American people.

In carrying out its mission, the Forest Service has three major programs:

Forest Research

Forest Service research develops the knowledge and technology required to enhance the economic and environmental values of all the Nation's 1.6 billion acres of forest and related rangeland. The program seeks better ways to use the resources of our forests and rangelands through the development of technology to reduce costs, increase productivity, and protect environmental quality. Research covers an extensive range of subjects and is coordinated with research at 60 forestry schools and agricultural experiment stations at land grant institutions. The research also supports international forestry through cooperation with other United States agencies, the United Nations, and foreign countries.

State and Private Forestry

The cooperative programs of State and Private Forestry are designed to improve production of renewable natural resources on non-Federal forest lands. Financial assistance and technical expertise are provided to State forestry agencies. The State organizations in turn deliver technical assistance to nonindustrial private forest landowners and others. Assistance is offered in such areas as forest pest management, fire protection, forest and watershed management, forest products utilization, forest resources planning, organization management, and community forestry. The cooperative forestry programs support investments in the largely untapped productive potential of nonindustrial private forest lands by strengthening the State forestry organizations and their programs. Such lands total more than 284 million acres, or 58 percent of the Nation's commercial forest lands.

National Forest System

The National Forest System contains approximately 191 million acres of public land located in 44 States, Puerto Rico, and the Virgin Islands. These lands include 155 National Forests, 19 National Grasslands, and 18 Land Utilization projects. The lands contain valuable natural resources which are important to the social and economic well being of the American people.

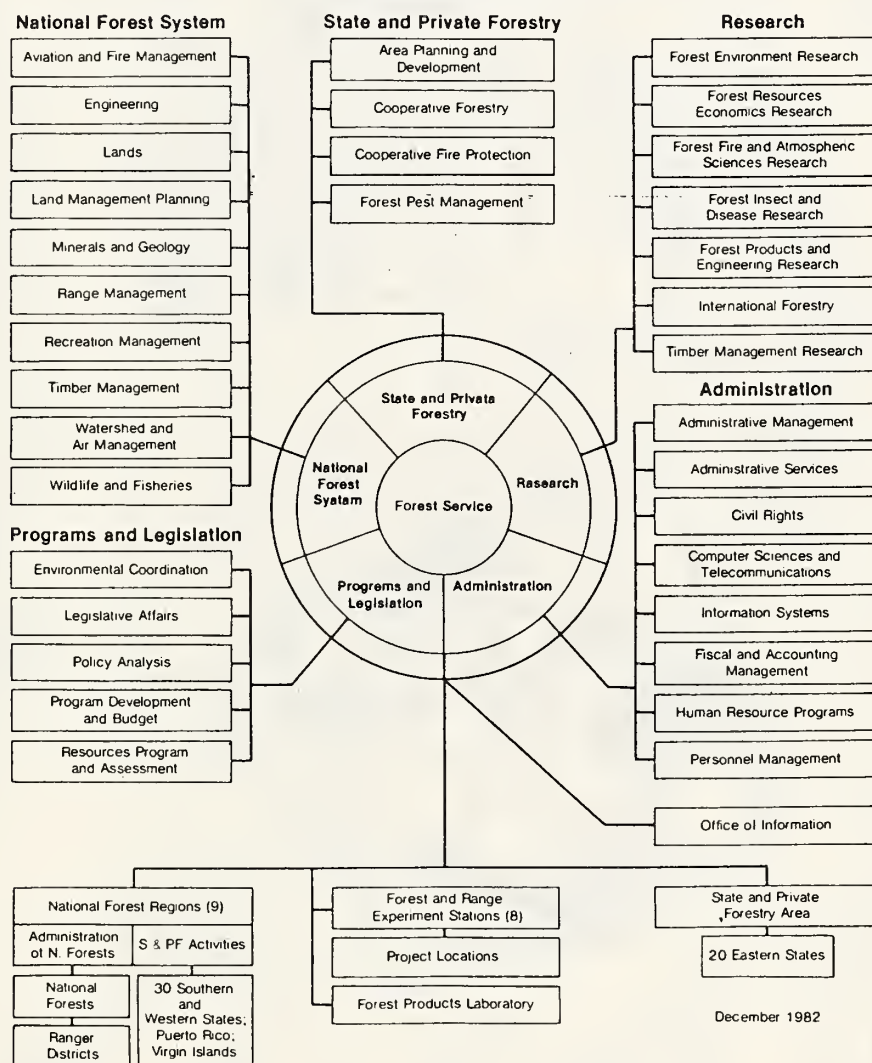
The Forest Service manages the National Forest System under the multiple-use concept for sustained production of timber, forage, fish and wildlife, water, and outdoor recreation. The minerals located on these lands also make a significant contribution toward helping the Nation meet the future energy needs through the exploration and development of coal, oil, gas, and geothermal resources.

ORGANIZATION

The Forest Service is a highly decentralized agency with approximately 98 percent of its personnel located in the field.

The following organizational chart and maps illustrate how the Forest Service is organized to carry out its programs.

Organization Chart U.S. Department of Agriculture Forest Service



The Forest Service United States Department of Agriculture



[illegible]

- ★ NATIONAL HEADQUARTERS
- EXPERIMENT STATION HEADQUARTERS
- ▲ FOREST PRODUCTS LABORATORY
- RESEARCH PROJECT LOCATIONS

-4-

Field Offices of the Forest Service

U.S. Department of Agriculture



NATIONAL FORESTS¹

Northern Region

Federal Bldg.,
Missoula, Mont. 59807

Idaho—

Clearwater	Orofino	83544
<i>Idaho Panhandle National</i>		
<i>Forests</i>	Coeur d'Alene	83814
Coeur d'Alene		
Kaniksu		
St. Joe		
Nezperce	Grangeville	83530

Montana—

Beaverhead	Dillon	59725
Bitterroot	Hamilton	59840
Custer	Billings	59103
Deerlodge	Butte	59701
Flathead	Kalispell	59901
Gallatin	Bozeman	59715
Helena	Helena	59601
Kootenai	Libby	59923
Lewis and Clark	Great Falls	59403
Lolo	Missoula	59801

Rocky Mountain Region

11177 W. 8th Ave.
Box 25127
Lakewood, Colo. 80225

Colorado—

Arapaho-Roosevelt ²	Ft. Collins	80521
Grand Mesa-Uncompahgre-		
Gunnison ²	Delta	81416
Pike-San Isabel ²	Pueblo	81008
Rio Grande	Monte Vista	81144
Routt	Steamboat Springs	80477
San Juan	Durango	81301
White River	Glenwood Springs	81601

Nebraska—

Nebraska-		
Samuel R. McKelvie ²	Chadron	69337

South Dakota—

Black Hills	Custer	57730
-------------	--------	-------

Wyoming—

Bighorn	Sheridan	82801
Medicine Bow	Laramie	82070
Shoshone	Cody	82414

Southwestern Region

517 Gold Ave., SW,
Albuquerque, N. Mex. 87102

Arizona—

Apache-Sitgreaves ²	Springerville	85938
Coconino	Flagstaff	86001
Coronado	Tucson	85702
Kaibab	Williams	86046
Prescott	Prescott	86301
Tonto	Phoenix	85034

New Mexico—

Carson	Taos	87571
Cibola	Albuquerque	87112
Gila	Silver City	88061
Lincoln	Alamogordo	88310
Santa Fe	Santa Fe	87501

Intermountain Region

324 25th St.,
Ogden, Utah 84401

Idaho—

Boise	Boise	83706
Caribou	Pocatello	83201
Challis	Challis	83226
Payette	McCall	83638
Salmon	Salmon	83467
Sawtooth	Twin Falls	83301
Targhee	St. Anthony	83445

Nevada—

Humboldt	Elko	89801
Toiyabe	Reno	89501

Utah—

Ashley	Vernal	84078
Dixie	Cedar City	84720
Fishlake	Richfield	84701
Manti-LaSal	Price	84501
Uinta	Provo	84601
Wasatch-Cache ²	Salt Lake City	84138

Wyoming—

Bridger-Teton ²	Jackson	83001
----------------------------	---------	-------

PACIFIC SOUTHWEST

630 Sansome St.,
San Francisco, Calif. 94111

California—

Angeles	Pasadena	91101
Cleveland	San Diego	92188
Eldorado	Placerville	95667
Inyo	Bishop	93514
Klamath	Yreka	96097
Lassen	Susanville	96130
Los Padres	Goleta	93107
Mendocino	Willows	95988
Modoc	Alturas	96101
Plumas	Quincy	95971
San Bernardino	San Bernardino	92408
Sequoia	Porterville	93257
Shasta-Trinity ²	Redding	96001
Sierra	Fresno	93721
Six Rivers	Eureka	95501
Stanislaus-Calaveras		
Big Tree ²	Sonora	95370
Tahoe	Nevada City	95959

Pacific Northwest Region

319 SW Pine St.,
P.O. Box 3623,
Portland, Oreg. 97208

Oregon—

Deschutes	Bend	97701
Fremont	Lakeview	97630
Malheur	John Day	97845
Mt. Hood	Portland	97233
Ochoco	Prineville	97754
Rogue River	Medford	97501
Siskiyou	Grants Pass	97526
Siuslaw	Corvallis	97330
Umatilla	Pendleton	97801
Umpqua	Roseburg	97470
Wallowa-Whitman ²	Baker	97814
Willamette	Eugene	97440
Winema	Klamath Falls	97601

Washington—

Colville	Colville	99114
Gifford Pinchot	Vancouver	98660
Mt. Baker-		
Snoqualmie ²	Seattle	98101
Okanogan	Okanogan	98840
Olympic	Olympia	98501
Wenatchee	Wenatchee	98801

¹ Headquarters locations in boldface type opposite National Forests.

² Two or more separately proclaimed National Forests under one supervisor.

FS-13

Revised June 1978.

Eastern Region
633 West Wisconsin Avenue
Milwaukee, Wis. 53203

Illinois—

Shawnee Harrisburg 62946

Indiana and Ohio—

Wayne-Hoosier² Bedford 47421

Michigan—

Hiawatha Escanaba 49829
Huron-Manistee² Cadillac 49601
Ottawa Ironwood 49938

Minnesota—

Chippewa Cass Lake 56633
Superior Duluth 55801

Missouri—

Mark Twain Rolla 65401

New Hampshire and Maine—

White Mountain Laconia 03246

Pennsylvania—

Allegheny Warren 16365

Vermont—

Green Mountain Rutland 05701

West Virginia—

Monongahela Elkins 26241

Wisconsin—

Chequamegon Park Falls 54552
Nicolet Rhinelander 54501

Southern Region
1720 Peachtree Rd., NW,
Atlanta, Ga. 30309

Alabama—

National Forests in
Alabama Montgomery 36101
William B. Bankhead
Conceh
Talladega
Tuskegee

Arkansas—

Ouachita Hot Springs 71901
Ozark-St. Francis² Nat'l Park
Russellville 72801

Florida—

National Forests in
Florida Tallahassee 32302
Apalachicola
Ocala
Osceola

Georgia—

Chattahoochee-
Oconee² Gainesville 30501

Kentucky—

Daniel Boone Winchester 40391

Louisiana—

Kisatchie Pineville 71360

Mississippi—

National Forests in
Mississippi Jackson 39205
Bienville
Delta
DeSoto
Holly Springs
Homochitto
Tombigbee

Southern Region (continued)

North Carolina—

National Forests in North
Carolina Asheville 28802
Croatan
Nantahala
Pisgah
Uwharrie

Puerto Rico—

Caribbean Rio Piedras 00928

South Carolina—

Francis Marion-
Sumter² Columbia 29202

Tennessee—

Cherokee Cleveland 37311

Texas—

National Forests
in Texas Lufkin 75901
Angelina
Davy Crockett
Sabine
Sam Houston

Virginia—

George Washington Harrisonburg 22801
Jefferson Roanoke 24011

Alaska Region

Federal Office Bldg.
P.O. Box 1628
Juneau, Alaska 99802

Alaska—

Chugach Anchorage 99501
Tongass-Chatham Sitka 99835
Tongass-Ketchikan Ketchikan 99901
Tongass-Stikine Petersburg 99833

RESEARCH HEADQUARTERS

Laboratory

Rocky Mountain—240 West Prospect St.,
Fort Collins, Colo. 80521

Forest Products Laboratory

North Walnut St.,
P.O. Box 5130
Madison, Wis. 53705

North Central—Folwell Ave., St. Paul, Minn.
55108

Forest and Range

Experiment Stations

Northeastern—370 Reed Rd., Broomall, Pa.
19008

Pacific Northwest—809 NE. Sixth Ave., P.O.
Box 3141, Portland, Oreg. 97208

Southern—T-10210 U.S. Postal Service
Bldg., 701 Loyola Ave., New Orleans,
La. 70113

Pacific Southwest—1960 Addison St., Box
245, Berkeley, Calif. 94701

Intermountain—507 25th St., Ogden, Utah
84401

Southeastern—Post Office Bldg., P.O. Box
2570, Asheville, N.C. 28802

STATE AND PRIVATE FORESTRY AREAS

State and Private Forestry offices are lo-
cated in the Regional Headquarters with the
exception of the following Areas:

Northeastern Area—S&PF

(Includes States in the Eastern Region—see
map)

370 Reed Rd.
Broomall, Pa. 19008

Southeastern Area—S&PF

(Includes States in the Southern Region—see
map)

1720 Peachtree Rd., NW,
Atlanta, Ga. 30309

6 1 11-20-83 15
TEMPORARY ENTRY

DATE: 12/9/83

NO. _____

1984 budget explanatory notes for Committee on
Appropriations / U.S. Forest Service. (Washington,
D.C. : U. S. Department of Agriculture, Forest
Service, 1983).
207 p.

SHF/bd

FOREST RESEARCH

	1982 <u>Actual</u>	1983 Appn. Enacted <u>to Date</u>	1984 <u>RPA</u> (Dollars	1984 <u>Base</u> in thousands)	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from '83</u>	Inc. (+) or Dec. (-) <u>from Base</u>
<u>Land and Resource</u>							
<u>Protection Research:</u>							
Fire and Atmos- pheric Sciences Research \$	9,014	8,294	14,180	8,517	7,418	-876	-1,099
FTE	211	174	—	174	150	-24	-24
Forest Insect and Disease Research \$	20,942	21,183	36,070	21,839	20,125	-1,058	-1,714
FTE	445	412	—	412	377	-35	-35
Renewable Resources Evaluation Research \$	13,332	12,166	22,210	12,573	11,271	-895	-1,302
FTE	295	240	—	240	214	-26	-26
Renewable Resources Economics Research \$	4,841	4,882	9,280	5,018	4,471	-411	-547
FTE	115	103	—	103	91	-12	-12
Surface Environment and Mining Research \$	1,845	1,677	4,710	1,710	1,369	-308	-341
FTE	43	35	—	35	28	-7	-7
Subtotal \$	49,974	48,202	86,450	49,657	44,654	-3,548	-5,003
FTE	1,109	964	—	964	860	-104	-104
<u>Renewable Resource Management and</u>							
<u>Utilization Research:</u>							
Trees and Timber Management Research \$	20,710	19,856	36,240	20,484	19,711	-145	-773
FTE	539	470	—	470	448	-22	-22
Forest Watershed Management Research \$	9,555	9,001	16,700	9,276	8,408	-593	-868
FTE	236	200	—	200	180	-20	-20

	<u>1982</u> <u>Actual</u>	<u>1983</u> <u>Appn.</u> <u>Enacted</u> <u>to Date</u>	<u>1984</u> <u>RPA</u> <u>(Dollars</u>	<u>1984</u> <u>Base</u> <u>in thousands)</u>	<u>1984</u> <u>Estimate</u>	<u>Inc. (+)</u> <u>or</u> <u>Dec. (-)</u> <u>from '83</u>	<u>Inc. (+)</u> <u>or</u> <u>Dec. (-)</u> <u>from Base</u>
Wildlife, Range & Fish Habitat							
Research \$	9,334	8,486	18,360	8,745	8,180	-306	-565
FTE	217	180	--	180	167	-13	-13
Forest Recreation							
Research \$	2,150	2,077	6,040	2,137	1,968	-109	-169
FTE	50	43	--	43	39	-4	-4
Forest Products							
Utilization							
Research \$	17,483	14,758	26,580	15,200	15,130	+372	-70
FTE	404	310	--	310	308	-2	-2
Forest							
Engineering							
Research \$	2,939	2,641	5,510	2,715	2,715	+74	--
FTE	55	44	--	44	44	--	--
Subtotal \$	62,171	56,819	109,430	58,557	56,112	-707	-2,445
FTE	1,501	1,247	--	1,247	1,186	-61	-61
TOTAL \$	112,145	105,021	195,880	108,214	100,766 ^{1/}	-4,255	-7,448
FTE	2,610	2,211	--	2,211	2,046	-165	-165

^{1/} Includes \$325,000 for implementation of the Boundary Waters Canoe Area Wilderness legislation (P.L. 95-495).

Appropriation Summary Statement

RESEARCH MISSION

This appropriation provides funds to enable Forest Service Research to find better ways to use the resources of our forests and associated rangelands through improved technology and reduced costs. The mission of Forest Service research is to develop the knowledge and technology required to enhance the economic and environmental values of all of America's 1.6 billion acres of forest and related lands. The 1980 RPA Assessment clearly shows the opportunities for the Nation if we fully utilize the productive forests and rangeland. We need to meet increasing demands for forest and rangeland products, but we must also maintain land productivity and protect environmental quality. To achieve these goals, Forest Service Research:

- Develops the scientific and technical knowledge needed for management of public land, about one-third of the Nation's land;
- Serves as an information reservoir for decisionmakers involved with national policy issues in forestry;
- Addresses short- and long-term problems in basic and applied research which are not dealt with by the private sector;
- Provides information and guidance for small private forest landowners, small businessmen, State agencies and commissions, and individual citizens; and
- Supports international forestry through cooperation with other United States agencies, agencies of the United Nations and foreign countries.

RESEARCH ADMINISTRATION

Forest Service research is carried on through a network of eight Forest and Range Experiment Stations and the Forest Products Laboratory at Madison, Wisconsin. Many of the field headquarters and laboratories are located on or near university or college campuses. Research is conducted through about 220 research work units (RWU's) at 79 locations throughout the United States, Puerto Rico, and the Pacific Trust Islands.

The direction and focus of research is kept timely through continuous review, evaluation, revision, and/or termination of RWU work plans at 5-year intervals. Periodic program reviews by the Washington Office and field supervisors, with invited outside participants, also ensures that research is directed to timely problems. Based on these reviews, programs are often redirected within existing funding constraints to new areas of emphasis in response to changing national and regional priorities. The research program is directed by the Deputy Chief for Research of the Forest Service.

He is supported by seven Washington Office technical Staff Directors and Directors of the Forest Experiment Stations and the Forest Products Laboratory. The problem-solving capability is vested in approximately 900 scientists, who produced more than 1,900 scientific publications in 1982. About half of the Forest Service scientists hold doctoral degrees, and an additional 35 percent hold master's degrees.

In 1982, about 9 percent of the research budget supported cooperative research at colleges, universities, other research organizations, and industry. This effort complements in-house capabilities, fosters strong coordination among research organizations, and frequently provides a means of achieving goals without increasing the Federal work force. While privately financed research is proprietary for individual sponsors, Forest Service research results are made public and serve a broad clientele.

RESEARCH PLANNING

Forest Service research program planning is carried out in accordance with requirements of the Resources Planning Act (RPA) of 1974 and Title XIV of the Food and Agriculture Act of 1981. Long-range research is planned in conjunction with the Nation's 60 forestry schools. While some research is addressed at national laboratories, most is best undertaken at the regional level close to specific forest and rangeland problems.

Forest Service research programs at Experiment Stations and the Forest Products Laboratory (FPL) are aimed at the high-priority technology needs within four geographical planning regions (Northeast, North Central, Southern, and Western) and the FPL. For each planning region and the FPL, research goals are formulated by groups composed of research and resource managers in the Forest Service, Cooperative State Research Service (CSRS), forest industry, forestry schools, and Agricultural Experiment Stations. Some goals may be similar among regions; others are unique to physical, biological, and social characteristics of individual regions or the FPL. National research program direction is forged primarily by analysis and aggregation of the regional plans and annual program budget submissions by the Experiment Stations and the FPL.

A 1982 report--the result of continuing national and regional planning efforts by forestry schools and universities and the U.S. Department of Agriculture--describes current and projected research to improve the contributions of the Nation's forest and range resources. Research proposed in the report, 1980-1990 National Program of Research for Forests and Associated Rangelands, is designed to respond to changing needs for which technology is inadequate; contribute to productivity, foreign exchange, and other benefits; and respond to national policies established by the executive and legislative branches of the Federal Government.

Another report published in 1982 identifies basic research needs. This report, Our Natural Resources: Basic Research Needs in Forestry and Renewable Natural Resources, was prepared by a national taskforce of 17 scientists representing the spectrum of United States forestry research. The scientists identified needs for new knowledge to assure that future research can provide to management the enlightened guidelines needed during the last years of this century, and beyond.

FY 1983 PROGRAM CHANGES

Fiscal year 1983 appropriations for forest research were 6.4 percent lower than fiscal year 1982 appropriations. This decrease supported the President's program to reduce Federal spending and employment and required several actions to maintain higher priority programs. Actions planned for completion in FY 1983 include:

- terminate 20-25 research work units
- terminate about 290 positions
- close 6 research locations

The budget for forest research in fiscal year 1984 is 4.1 percent lower than fiscal year 1983. This decrease continues to reflect the overall objective to improve efficiency and reduce costs by further streamlining the Forest Service's research organization. These actions include:

- terminate an additional 12-18 research work units
- close research locations at Reno, Nevada; Davis, California; and Sewanee, Tennessee.
- abolish about 165 positions

Planned actions are described in more detail under the appropriate budget activity.

Decisions about program changes are guided by the following criteria and considerations:

- Relation of research programs to the mission/goals of the Administration, the Department of Agriculture and the Forest Service.
- Importance and timeliness of research problems, e.g., what difference will the research make if successful?
- Impact of the research, e.g., who will be affected if the research is successful and in what way?
- Availability of adequate personnel, funding, and leadership for the research program.

- Status of the research, e.g., is it nearing completion, can it be postponed?
- Research that is uniquely a Federal responsibility in terms of capability to strengthen Federal action programs and international initiatives.
- Research that is long range and high risk requiring coordinated planning, continuity of effort, and a stable research environment.
- Research serves critical consumer interests, e.g., lumber standards and fire safety.
- Research not undertaken by other institutions because of their narrower geographic focus and shorter term perspective.

ANALYSIS OF RESEARCH PROGRAMS

Early in 1982, the Office of Management and Budget directed the Forest Service to study the use and relevance of its research program in order to analyze the appropriateness of the research for federal funding. Current research was classified as (1) basic research; (2) explicitly mandated by Federal statutory or regulatory requirements; (3) necessary to manage and protect Federal resources; (4) related to national defense; (5) high-risk, long-term applied research; and (6) applied research that resembles industrial research and could be performed by the private sector for profit.

Research problem areas were classified by the Forest Services into the six categories as follows:

<u>Category</u>	<u>Proportion of Program (percent)</u>
Basic research	38
Statutory related	9
Management of the National Forests	44
Defense related	1
High-risk, long-term applied	6
Applied research resembling industrial research	2
Total	<u>100</u>

The largest single research component is directly related to management and protection of National Forests but most of this research is also applicable and available to private forest lands. Likewise, research from the other five categories is published and available to the entire scientific community and the general public as opposed to proprietary research of industry.

Following this classification, the OMB-Forest Service team selected 15 case studies for in-depth analysis on research use, its relevance to the public interest, duplication of private-sector endeavors, and related aspects. The case studies involved research in forest products and engineering, timber management, forest insects and disease, urban forestry, fire, and economics. The team identified 64 research users and invited them to participate through informal telephone interviews.

The interviews indicate that virtually all of the case study projects in either agency were viewed by the private sector participants as appropriate research for the Federal Government. Since the majority of the case study projects were chosen from the category of research projects containing work classified as that most closely resembling commercial research, the results suggest that little, if any, research is likely to be viewed as inappropriate by the major users and beneficiaries. This is not to say that all such research should therefore be undertaken.

The study provides little evidence that much, if any, of the research would be done by the private sector if it were terminated by the Forest Service. However, the interview results do suggest some apparent or potential willingness on the part of many users to provide or to continue to provide supplementary support through "in kind" and limited financial contributions for several ongoing or potential projects. Difficulties in the organization of user group schemes to collect funding for such purposes and the distressed financial condition of most sectors in the forestry industry, however, limit these potentials for the next few years.

The Department has initiated some actions to address issues raised in this study and propose to pursue further steps to ensure that USDA forest and agriculture research programs are kept effective and consistent with Administration research policy. These steps include:

- Development of a proposed Secretary's Memorandum to clarify research policy and require continued review of research programs to identify and phase out research which should appropriately be done by the private sector.
- Development of guidelines for encouragement of user group contributions to help support applied research projects, and development of steps to improve user group participation in research program planning (as desired by many of those interviewed).
- The few case study research projects criticized by some interviewees as containing unproductive or inappropriate elements will be subjected to further review and adjusted or redirected as appropriate.

AUTHORITIES:

P.L. 78-412, Department of Agriculture Organic Act of September 21, 1944
(7 U.S.C. 2250)
Section 703

Erect, alter and repair buildings necessary to carry out authorized work.

P.L. 89-106, Special Research Grants Act, August 4, 1965, (79 Stat. 431; 7 USC 450i).

Establishes authority for the Secretary of Agriculture to make research grants to State agricultural experiment stations, colleges, universities, and other federal and private research institutions and organizations. Basic and applied research grants are intended to further USDA programs.

P.L. 93-378, Forest and Rangeland Renewable Resources Planning Act, August 17, 1974, (88 Stat. 476, as amended; 16 USC 1601).

Directs the Forest Service to periodically prepare a long-range renewable resource assessment and program to ensure that the United States has an adequate supply of forest and range resources in the future while maintaining a quality environment.

P.L. 95-113, Food and Agriculture Act of 1977 (Title XIV), as amended by P.L. 97-98, December 22, 1981, (7 U.S.C. 1281 note and 7 U.S.C. 3221, 3291).

Provides for increased cooperation and coordination in the performance of agricultural research by Federal departments and agencies, the States, State agricultural experiment stations, colleges and universities, and other user groups (7 U.S.C. 1281).

Authorizes the Secretary of Agriculture to engage in certain activities related to international agricultural research and extension including to "assist the Agency for International Development with agricultural research and extension programs in developing countries."

The 1981 amendment emphasizes the importance of long-range planning for research, extension, and teaching. Expands the purpose of the 1977 Act to include improving coordination and planning of research, extension, and teaching and to ensure that results are communicated and demonstrated to farmers, processors, handlers, consumers, and all other users.

It also added two new responsibilities to this section of the 1977 Act that designates USDA as the lead agency of the Federal Government for agricultural research, extension, and teaching by (1) requiring coordination with the RPA Assessment and Program, and the Appraisal and Program of the RCA and (2) overcoming barriers to long-range planning by developing "a long-term needs assessment for food, fiber, and forest products, and by determining the research requirements necessary to meet the identified needs."

P.L. 95-307. Forest and Rangeland Renewable Resources Research Act, June 30, 1978, (92 Stat. 353; 16 U.S.C. 1641 et. seq.)

Updates, clarifies, and consolidates current forest and range research authorities that rested principally in the McSweeney-McNary Act of 1928; provides a specific forest and rangeland link to Title XIV of the 1977 Farm Bill, the National Forest Management Act of 1978 (NFMA), and the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA); provides competitive grant authority; and expands authority for foreign research cooperation.

Such sums as are necessary. No expiration date.

P.L. 95-495, Act of October 21, 1978, 92 Stat. 1649
Sections 5(d), 6(c) (1-2), 11(f), 18(e), and 19

Establishing the Boundary Waters Canoe Area Wilderness and Boundary Waters Canoe Area Mining Protection Area.

Authorization: Section 6(c) (2) \$3,000,000 additional for grants to the State for resource management activities.
Section 6(d) (1) \$8,000,000 for resource management on the Superior National Forest.
Sections 5(d), 11(f), 18(e), and 19 such sums as necessary.

P.L. 96-487, Act of December 2, 1980, Alaska National Interest Lands Conservation Act.
Sections 101-103, 501-507, 703-708, 1201-1203, 1301-1328

Authorization: Section 705 (a) about \$40,000,000 annually
Section 705 (b) \$5,000,000 annually

Such sums as are appropriated by Congress. No expiration date specified.

Fire and Atmospheric Sciences Research

	1982 <u>Actual</u>	1983 Appropriation enacted to Date	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Total	\$ 9,014	8,294	8,517	7,418	-1,099
FTE	211	174	174	150	-24

(Dollars in thousands)

Objective: To develop methods and guidelines that (1) prevent and control wildfires; (2) reduce loss of life, property, and forest resources; (3) reduce weather-related losses of forest resources; and (4) better use prescribed fire to achieve forest and range objectives at reduced cost.

Program description: Fire can be destructive or beneficial. Uncontrolled wildfires burned about 3.5 million acres during the last half of the 1970's, at an average yearly control cost of \$620 million besides loss of life, property, and forest resources estimated at over \$1 billion. During the same period, prescribed fire saved \$85 million as an alternative to other methods of hazard and residues reduction, site preparation, and habitat improvement. Reducing wildfire losses and increasing prescribed fire benefits requires technical knowledge of how weather, terrain, and vegetation combine to determine fire behavior. The Forest Service forest fire and atmospheric science program is the only research effort in the United States dedicated to supplying this knowledge.

Forest Service scientists develop methods to determine the likelihood of fires starting, to estimate the time and location of fire occurrence, and to predict fire behavior. The goal is continued safe and efficient fire control with lower personnel costs. Investigators are developing guidelines to determine the impacts of prescribed fire. They are also developing guidelines to meet air quality standards and smoke management requirements of regulatory agencies so that prescribed fire can substitute for herbicides, mechanical equipment, and hand labor in manipulating undesirable forest vegetation. Firefighting is expensive, and researchers are developing methods to balance costs against potential damages, and find ways to help managers analyze available alternatives. These efforts will help reduce costs while keeping losses to acceptable levels. New fire science technology will greatly enhance management's alternatives. The research program must continue to develop the new technology needed to keep firefighting costs minimal. Examples of recent accomplishments are described below:

Models Developed For Timing Prescribed Fires

The key to reducing air pollution and soil damage from prescribed slash burning is the moisture content of the large, woody fuels being burned. Researchers at the Pacific Northwest Station have developed a group of models to determine the weather conditions necessary to consume the desired level of wood fuel. This, in turn, will result in acceptable duff removal and reduced air pollution. If too much duff is consumed the soil may erode, or if the fuel is too wet too much smoke can be produced.

The models can be used for planning, daily monitoring, or prediction. They use meteorological data routinely available from fire-weather and remote, automated weather stations. The components of the system are being field tested in National Forests in the Pacific Northwest and Pacific Southwest Regions, and by the Intermountain Station.

If the new models prove practical for use in prescribed burning on west-side National Forests in the Pacific Northwest, the following benefits can be expected:

- Near elimination of regeneration failures or erosion caused by too-severe burning.
- Reduction of particulate emission to the atmosphere by at least 150,000 tons annually.
- Savings of at least \$2 million annually in prescribed burning costs.

Satellite Imagery Used To Map Forest Fuels

Land management agencies need better methods to assess the risk of fire over large geographic areas. Data bases that describe the vegetation and litter as fuel are needed for many fire management purposes and for research on fire modeling techniques. The problem is how to gather data over large areas economically but make it detailed enough for local use. A pilot study at the Intermountain Forest and Range Experiment Station shows that forest vegetation types can be mapped over large areas and interpreted locally as "fuels" by combining two types of information: satellite imagery and digital terrain data. The mapping system may substantially reduce costs over current manual inventory methods.

In a cooperative effort, researchers used satellite data stored at the EROS (Earth Resources Observation System) Data Center in South Dakota. The digital terrain data came from the U.S. Coast and Geodetic Survey. Ground truth data points were established to program the computer to discern fuels from the satellite imagery and the terrain data. The new techniques are being adopted by the National Park Service in Yosemite National Park and by the Bureau of Land Management in eastern Oregon and Alaska.

The Intermountain Station has also published a guide to select fuel models to predict fire behavior on specific sites where better delineation of fuels is required. Descriptions and colored photographs illustrate typical or "model" fuels. These fuel models are being used to train forestry professionals through the interagency National Wildfire Coordinating Group.

Research Explains Odd Fire Pattern

Scientists at the North Central Station have proposed a theory to explain a unique pattern of burned and unburned vegetation that occurs during crown fires on level terrain. Mile-long, narrow strips of unburned tree crowns are sometimes left in the wake of a crown fire. In those areas, the trees are unburned, but the ground is black. To explain this recurring pattern, researchers have proposed a theory of air movement caused by "horizontal roll vortices."

Researchers believe the vortices are caused when rising gases along the perimeter of a fire meet the normal horizontal wind. This creates a wind shear that acts much like a dust devil on its side: the wind rolls forward in a spiral motion along the flanks of the fire, creating the odd pattern of unburned crown. (See Figure 1.) The theory was developed from observations of forest fires in Michigan and New Jersey and from knowledge of fire patterns in other parts of the country.

Safety of firefighters is the major concern. The phenomenon may have caused the death of several firefighters. By combining laboratory findings with data from actual fires, researchers hope to learn how to predict when vortices are likely to occur, thereby increasing safety for firefighters. The research has application throughout the Eastern United States, Southeastern Canada and Australia, and anywhere crown fires occur in relatively flat terrain.

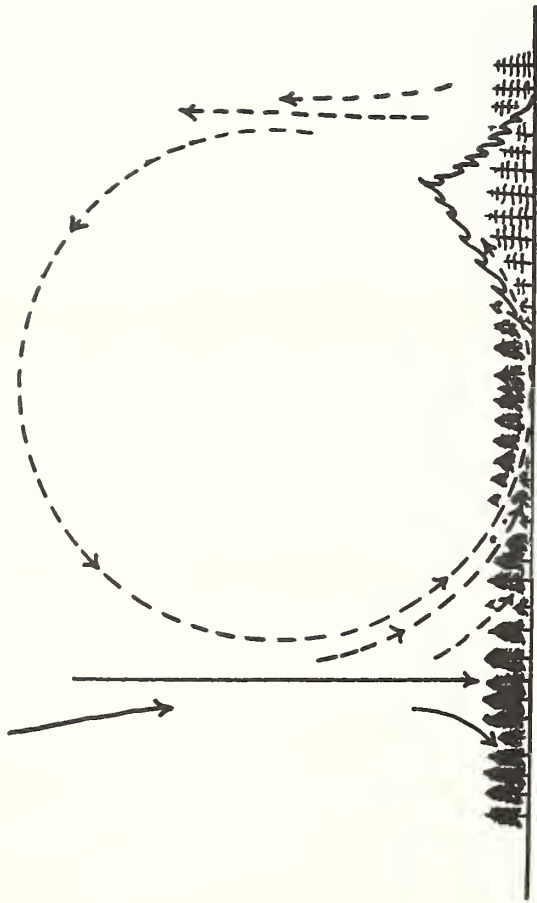


Figure 1. Cross sectional view depicting how the activity of a horizontal roll vortex causes trees on the right to burn while inhibiting the burning of those on the left during a severe fire. Downward streams of air cause the fire to move outward instead of upward, preventing the burning of tree crowns.

Decrease for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Decrease</u>
Fire and atmospheric sciences			
research \$	8,517	7,418	-1,099
FTE	174	150	-24

A decrease of \$1,099,000 will result in a combination of management actions to: (a) concentrate research effort on the highest priority problems, (b) combine programs, and (c) accelerate the conclusion of nearly completed research. These actions include:

- Combine programs at Macon, Georgia, on smoke chemistry, fire behavior, and weather effects on fire to reduce costs. The highest priority current research from the programs will be conducted in a new unit, essentially completed research will be closed out, and no new research will be initiated. The units planned for termination are:

SE-2110 (Macon, GA) Combustion Processes in Wildland Fuels

SE-2111 (Macon, GA) Fire Science Adaptations for the Southeastern United States

SE-2112 (Macon, GA) Forestry Weather Data Systems

- Complete some basic aspects of fire retardant systems research.
- Complete and closeout some phases of chaparral management, fire ecology, and fire economics research.
- Reduce overall program costs of research on prescribed burning and impacts of smoke research in the West.

In summary, these actions will result in closeout of three research work units and the establishment of one new unit.

Object class information:

Salary	-658
Travel	-50
Rent, communications and utilities	-55
Supplies, materials and equipment	-96
Other contractual services	-240
Total	-1,099

Forest Insect and Disease Research

		1982 <u>Actual</u>	1983 Appropriation enacted to Date (Dollars in thousands)	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Total	\$	20,942	21,183	21,839	20,125	-1,714
	FTE	445	412	412	377	-35

Objective: To provide technology to optimize forest and associated rangeland resource productivity, value, and usefulness and to protect wood in use and storage by preventing or minimizing insect and disease caused damage.

Program description: The forest insect and disease research program provides knowledge and technology to:

- Define, measure and evaluate the ecological, economic and social impacts of destructive insects and disease-causing organisms on all forest resources and on wood in storage and use.
- Detect, assess and predict changes in the distribution and abundance of pest populations and their impacts on resource values.
- Reduce or maintain pest populations and damage at tolerable levels through control techniques and management strategies that are ecologically sound, economical and environmentally acceptable.

Research provides the technology and management systems needed to help reduce: (1) the average annual timber mortality of 2.4 billion cubic feet (19 million cords); (2) area defoliated by insects (16 million acres in 1980); (3) area infected with disease organisms (more than 60 million acres in 1980); and (4) the annual expenditure of over \$800 million to protect wood in use from termites and other wood-destroying organisms.

Research is seeking a thorough understanding of the roles of various insects and microorganisms in forests and related ecosystems to permit integration of pest management into total forest resource management. Forest insect and disease research also seeks ways to extend service life of wood products by protecting wood in storage and use. In addition, techniques are being developed to aid tree establishment and growth by using specialized fungi that grow in intimate association with tree roots. This involves fundamental and/or applied research which is conducted both in laboratories under controlled conditions, and in the field under natural conditions. The research spans many areas, including entomology, pathology, physiology, ecology, genetics, mycology, nematology, microbiology, virology, biochemistry, and a wide spectrum of related scientific disciplines. Examples of recent research follow:

Budworm Programs Develop Management Tools

The spruce budworms are major defoliators of spruce, fir, and Douglas-fir forests in North America. Millions of acres of timber are defoliated each year by the spruce budworm in the Northeast and the Lake States and by the western spruce budworm in the West. (See Figure 2.) Repeated, heavy defoliation can slow growth, reduce timber quality, inhibit regeneration, and cause top-kill and even death of trees.

Progress is being made in managing and controlling the budworms through research and development work under the Canada/United States Spruce Budworms Program in both the East and the West.

In the West, a method called "radial increment analysis" has been developed to help determine the effect of the western spruce budworm on conifer regeneration and growth of young stands. It relies on a comparison of measurements of the width of growth rings of nonhost trees with growth rings of trees on which the budworm has fed. The method can be used in forest management to: (1) hazard-rate stands for susceptibility to budworm attack; and (2) prescribe appropriate silvicultural treatments to reduce budworm damage.

In the Lake States, a hazard-rating system using standard forest inventory data has been developed to identify stands vulnerable to spruce budworm damage. The rating scheme helps managers decide which stands to monitor for potential outbreaks and where to accelerate timber harvest if budworms are present.

Early Warning Developed For The Webbing Coneworm

The webbing coneworm is an insect pest that can seriously reduce yields of genetically improved seed in loblolly pine seed orchards in the South. To help prevent such losses, scientists at the Southeastern Station have developed an "early warning" system to monitor coneworm populations and indicate when and where damage can be expected.

The system relies on the naturally occurring sex attractant (pheromone) of the female moth. The pheromone is a powerful attractant that in nature entices male moths to females for mating and reproduction. The chemical identity of the pheromone has been determined, enabling it to be synthesized and used in survey traps to monitor seed orchards. The number of male moths caught indicates the potential population size in the next generation and, therefore, the damage level that might be expected. (See Figure 3.)

The pheromone was used in 1981 in 63 seed orchards in the South where it proved successful in identifying places where unacceptable losses might occur. Use of the pheromone trapping system as an early warning device has several advantages over the present technology. It:

- Adds another weapon in the manager's arsenal for integrated pest management.
- Is relatively inexpensive, costing about \$100 for materials to monitor an orchard per year.



Figure 2. Spruce budworms are major defoliators of spruce-fir and Douglas-fir forests in North America.



Figure 3. Male webbing coneworm (*Dioryctria disclusa*) moths caught in sticky adhesive of a Pherocon IC® sex attractant trap.

- Makes unnecessary the practice of using protective insecticide applications, in anticipation that an outbreak might occur. This means less cost to the industry and more efficient use of insecticides.

- Increases the effectiveness of chemical sprays when they are required, by permitting more accurate timing of applications.

Chemical Treatments Protect Waterfront Structures From Decay

Results of a 13-year study at the Forest Products Laboratory have shown how to prevent decay in waterfront structures. Even though the above-water sections of these structures are treated for decay before installation, they become susceptible to fungal attack when the wood checks and untreated wood is exposed. Properly used, information from the study could save hundreds of millions of dollars each year in the United States alone.

Several treatments are effective. Annual application of fluor-chrome-arsenic-phenol (FCAP) completely prevented decay of southern pine decking during the 13 years of the field test. Douglas-fir planks treated annually with applications of sodium pentachlorophenol, penta in oil, or FCAP were also free from decay. Pile tops have also remained sound when treated either with penta-grease or ammonium bifluoride in holes drilled into the piles. Treating pile tops with sodium penta or penta, followed by application of a capping compound, also completely protected the wood.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Forest insect and disease			
research\$	21,839	20,125	-1,714
FTE	412	377	-35

A decrease of \$1,714,000 will result in a combination of actions to: (1) concentrate research effort on the highest priority problems, and (2) accelerate closeout of nearly completed research. These actions include:

- Closeout research on diseases of California forests, an action made possible by completion of work on root rots and mistletoe. This will allow concentration of effort on biology of pests affecting regeneration of western forests. The unit planned for termination is:

PSW-2205 (Berkeley, CA) Biology and Control of Diseases of Conifer Forests.

- Move research on field evaluation of insecticides from Davis, California, to available laboratory and office space at Berkeley, California. The most important research will be combined with existing work on biology and control of pests affecting regeneration. Savings will result from reduced operating costs and program scope. The unit planned for termination is:

PSW-2206 (Davis, CA) Field Evaluation of Chemical Insecticides

- Closeout pioneering research on integrated management systems for forest pests. Concepts developed since 1973 are now being used in both research and action programs; applied research on integrated pest management will be continued in other units. The unit planned for termination is:

PSW-2299 (Berkeley, CA) Integrated Management Systems for Forest Insects and Disease

- Closeout newly initiated research in the Southeastern Station on assessing pest impacts. Because the research is new, there are no longterm research study commitments and impacts are less than in other established pest research units. The unit planned for termination is:

SE-22XX (New) Pest Impact Assessment Technology

- Reduce research on dwarf mistletoe, mycorrhizae, pitch canker, eastern and western spruce budworms, termites, mountain pine beetle, and southern pine beetle.

- Funding distribution by major pest or problem for 1983 and 1984 is as follows:

<u>Pest or Problem</u>	<u>FY 1983</u> <u>(est.)</u>		<u>FY 1984</u> <u>(est.)</u>	
	\$M	(%)	\$M	(%)
Diseases and insects of high value plantations	2,651	(16)	2,692	(17)
Regeneration insects and disease	2,581	(15)	2,145	(13)
Other important conifer & hardwood insects and disease	1,935	(12)	1,831	(12)
Major rust, canker, foliar, and root diseases	1,760	(10)	1,749	(11)
Spruce budworms	1,755	(10)	1,387	(9)
Gypsy Moth	1,478	(9)	1,478	(9)
Protection of wood	1,288	(8)	1,167	(7)
Other bark beetles	1,198	(7)	1,205	(8)
Mycorrhizae	748	(4)	751	(5)
Southern pine beetle	699	(4)	699	(4)
Douglas-fir tussock moth	622	(4)	622	(4)
Live oak wilt	105	(1)	105	(1)
GRAND TOTAL BASE	\$16,820	(100)	\$15,831	(100)
Insects	(10,495)		(9,924)	
Diseases	(6,325)		(5,907)	
CANUSA <u>1/</u>	2,357		2,288	
IPM-SPB <u>2/</u>	1,531		1,531	
TOTAL Forest Service	\$20,708		\$19,650	
Transfer to SEA:	475		475	
(CANUSA)	(300)		(300)	
(IPM-SPB)	(175)		(175)	
APPROPRIATION TOTAL	\$21,183		\$20,125	

In summary, the 1984 program will result in closure of one location (Davis, CA) and closeout of four research work units.

1/ CANUSA represents the Canada-US Spruce Budworm Program.

2/ IPM-SPB's represents Integrated Pest Management-Southern Pine Beetle.

Object class information:

Salary	-968
Travel	-47
Rent, communications and utilities	-68
Supplies, materials and equipment	-118
Other contractual services	-483
Grants	-30
Total	-1,714

Renewable Resources Evaluation Research

	1982 <u>Actual</u>	1983 Appropriation enacted <u>to Date</u> (Dollars in thousands)	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Total\$	13,332	12,166	12,573	11,271	-1,302
FTE	295	240	240	214	-26

Objective: To provide comprehensive, continuing information about and analyses of the characteristics of forest land resources of the United States.

Program description: This research program conducts continuing inventories to ascertain trends in extent, condition, ownership, quantity, and quality of the Nation's forest resources. The data and analyses developed by the program provide technical information about timber, wildlife habitat, forage production, and other resource characteristics needed for State and national resource planning. Program information is also used in the private sector by companies and individuals who invest in forestry and timber processing facilities.

Renewable resources evaluation research also conducts studies to monitor the extraction and use of timber by the forest products industry. Data on pulpwood production are collected and reported annually. Statistics on other forest industries are reported with each completed State survey. Research determines present and prospective national consumption of wood products by major end-use components, and relates these requirements to national timber supply.

Collectively, these comprehensive analyses of the supply and demand for timber from the Nation's forest lands provide the basis for developing public and private forestry policies to assure a continuing and sustained supply of timber and other forest products. Efficient forest inventory and data analysis techniques to maintain a cost-effective program are developed through research at regional work units and at two national projects located in Colorado. Examples of recent accomplishments are described below:

Mid-Cycle Inventories Monitor Changing Timber Resource

Past timber and resource inventories in the midsouth have been conducted on a 10-year cycle, however, statistics are quickly outdated. Inventory changes are caused by conversion of forest land to other uses, or timber harvest, fire, insects, or disease. More intensive forest management requires more frequent inventory information. The big problem is cost.

A new low-intensity inventory procedure has been developed at the Southern Station to meet resource managers' information needs. The procedure was used to conduct a limited objective reinventory of timber resources in Louisiana. Forest acreage was determined from high altitude aerial photography at the National Forestry Applications Laboratory at Johnson Space Flight Center in Houston, Texas. About

220 plots from the regular survey were remeasured cooperatively by crews from the Southern Station and the Louisiana Office of Forestry. The Louisiana Department of Natural Resources also provided financial assistance.

This midcycle inventory was highly successful. Researchers found that some of the inventory information could be obtained from high altitude photography. Limited objective reinventories can be made at 5- rather than 10-year intervals, at one-tenth the cost of regular surveys. The procedure has also been used to produce midcycle estimates for Oklahoma, and similar work has begun in Mississippi. These are mid-cycle, interim inventories. They do not replace the comprehensive 10-year inventories.

Nearly 8 Million Forest Owners Identified

Privately owned forests are expected to become increasingly important in supplying the wood resources this Nation needs. But, how many owners are there, where are they, and how much do they own? A cooperative nationwide survey of 11,000 private forest owners conducted by the Northeastern Station, the Forest Service's division of State and Private Forestry, and the Economics Research Service gathered important information for planning new incentive programs for management of private forest lands.

There are 7.8 million owners and 7.2 million of them are in the East. Seventy-one percent of all ownerships are in small parcels of 10 acres or less; however, this accounts for only 4 percent of the area in private forest land. In contrast, large ownerships of 500 or more acres comprise less than 1 percent of the total owners but contain 50 percent of the forest land. Seven percent of the ownerships are medium sized, ranging from 100 to 500 acres and contain 30 percent of the forest land.

About one-third of all private forest land is owned by corporations, mostly by forest-based industries that control substantial tracts of land to support their operations. Over half of the corporate land is located in the South.

Of the remaining private forest land, farmers hold 16 percent; white collar workers, 15 percent; retired persons, 14 percent; and blue-collar workers, 11 percent. Over half the private forest land is in ownerships acquired since 1950, although nearly 16 percent has been in the same ownership for more than 40 years.

The landowners generally live near their land--nearly 82 percent of noncorporate forest-land owners live in the county of their holdings, and 92 percent live in the same State.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Renewable resources evaluation			
research\$	12,573	11,271	-1,302
FTE	240	214	-26

A decrease of \$1,302,000 will result in the following:

- The cycle of complete reinventories will be lengthened.
- Timber resource analysis will be emphasized.
- Increased support will be sought from both State and private cooperators.
- Charges will be initiated for special data analyses and compilations.

These actions will not require the termination of research work units or closures of locations.

Object class information:

Salary	-620
Travel	-77
Supplies, materials and equipment	-93
Other contractual services	-400
Grants	-112
Total	-1,302

Renewable Resources Economics Research

	<u>1982 Actual</u>	<u>1983 Appropriation enacted to Date</u>	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Inc. (+) or Dec. (-) from Base</u>
Total	\$ 4,841	4,882	5,018	4,471	-547
FTE	115	103	103	91	-12

(Dollars in thousands)

Objective: To provide economic methodology and analyses for forest and rangeland situations and for related product distribution systems to be used in management

decisions. This research is also used in developing long-term Federal forest policies.

Program description: Studies are conducted to:

- Provide public and private forest owners and managers with methodologies for economic analyses of natural resource management choices.
- Provide forest managers with concepts and procedures to evaluate multiple output trade-offs on public and private lands.
- Analyze present and future forest product demands, values, and trade patterns.
- Evaluate the economic feasibility of emerging product and processing technology for wood utilization.

These studies provide input into policy and management decisions at the local, regional, and national levels in both the public and private sectors. The research also provides a technical basis for Congressional deliberations to develop programs and policies for efficient and sustained management of timber and other forest resources. Recent examples include gypsy moth risk rating for timber management decisions; timber supply-demand projections for national assessments; multiple-use models for simulating management decisions and their ecologic and economic impacts; and analyzing the economic feasibility of new paper production processes. These kinds of studies help professionals make forestry-related decisions that save taxpayers, landowners, timber processors, and forest products consumers large sums of money. Recent accomplishments are described below:

It's Economical To Grow Southern Pine Seedlings In Containers

Analyses by researchers at the Southern Station using construction and production cost records show that it is economical to grow loblolly and longleaf pine seedlings in containers. The cost of container seedlings is as much as 10 percent less than growing bare-root seedlings in a new nursery. (See Figure 4.) Of particular significance is that the initial cash outlay required for container nursery construction is less than half that of a new bare-root nursery. Further, the annual seedling output level becomes economical at 3 to 4 million container seedlings compared with 12 to 15 million bare-root seedlings. Nursery managers who want to expand seedling capacity can put a container nursery almost anywhere. Site quality requirements are minimal, and the acreage needed is small. Container nurseries can be in full production in less than a year.

The results of this work were presented at a 3-day conference in Savannah, Georgia, which drew 125 attendees from the United States and two foreign countries. As a result, two major forest products firms and a private nurseryman have built new nurseries to grow southern pine seedlings in containers.

Private Timber Investments Could Have Major Impacts

Investment by private landowners in forest management can have a major impact on long-term prices and consumption behavior in forest products markets. A harvest investment model that explains the impact private owners can have on timber

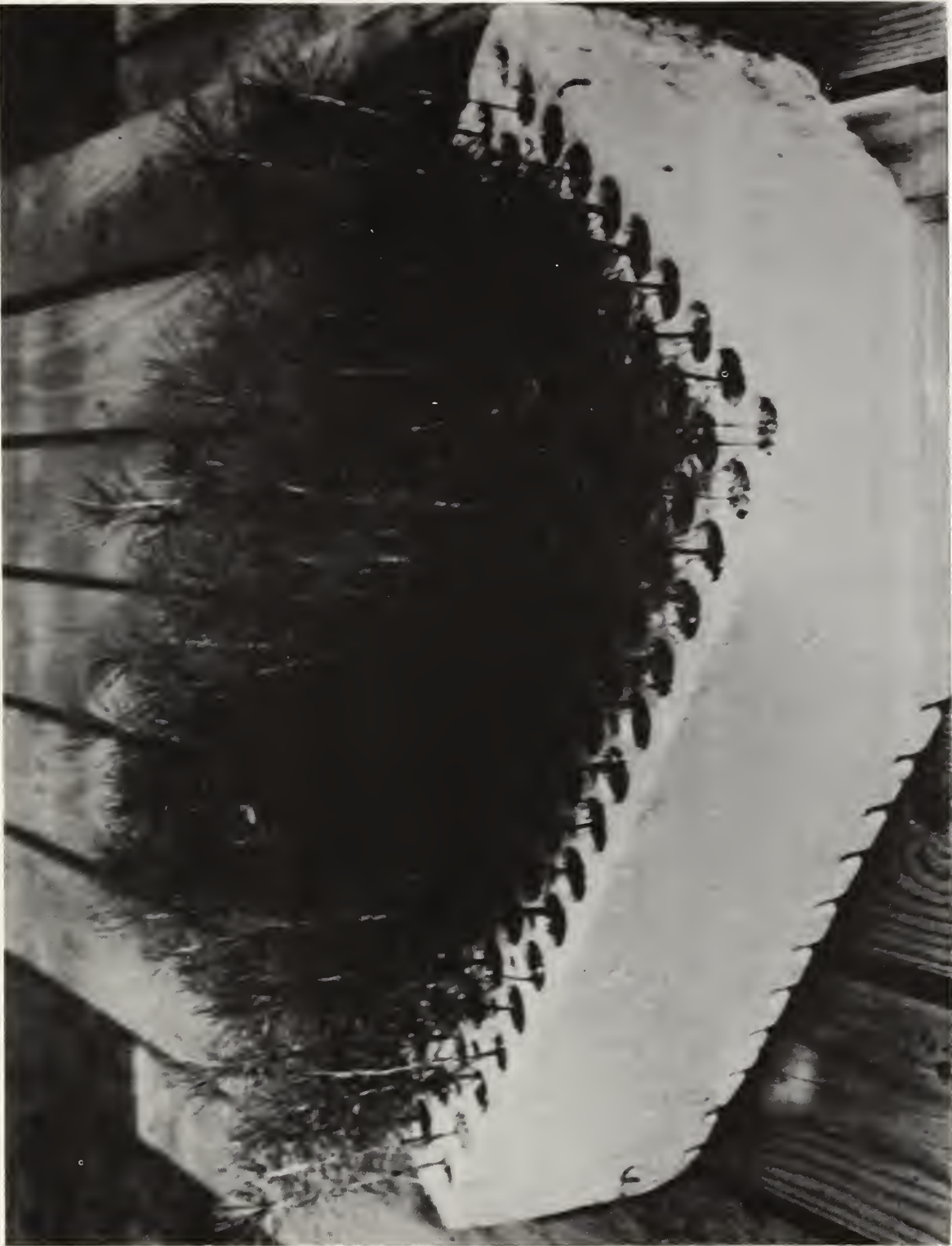


Figure 4. Sixteen-week old loblolly pine seedlings, the fourth crop in the block pictured, are ready for outplanting. Styrofoam blocks are the most economical because they can be reused up to six times and stand rough handling at the planting site and on the trip back to the nursery.

supplies was developed by the Pacific Northwest Station in conjunction with the Southeastern Station.

The model indicates that increasing private investment would have little effect on markets before the year 2000. Thus, public policies designed to augment short-term timber supply in regions with declining harvest should rely on expanded harvest from public lands rather than accelerated investments on private lands.

Another effect of increased private investment could be to stabilize real wood product prices after the year 2000. Imports of softwood lumber could also be eliminated by 2030. Major gains in domestic production would replace lumber imports from Canada because they would no longer be competitive in the United States.

The model also predicts the expansion of wood product markets in southern forest regions. The South has roughly 9 times the commercial forest acreage of the Douglas-fir region in the Pacific Northwest and California combined, and nearly 12 times the area of manageable stands.

Information from this model has been used in the timber assessments required by the Resource Planning Act, and by the Forest Service's Division of State and Private Forestry to analyze the economic opportunities to increase softwood production on private land.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Renewable resources			
economics research\$	5,018	4,471	-547
FTE	103	91	-12

A decrease of \$547,000 will result in concentrating research effort in the highest priority problems and reducing effort on problems of relatively lower priority. Research will be conducted nationwide on the highest priority projects.

These actions will not require terminating research work units or closing locations.

Object class information:

Salary	-339
Travel	-18
Supplies, materials and equipment	-21
Other contractual services	-169
Total	-547

Surface Environment and Mining Research

	<u>1982</u> <u>Actual</u>	1983 Appropriation enacted <u>to Date</u> (Dollars in thousands)	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Total	\$ 1,845	1,677	1,710	1,369	-341
FTE	43	35	35	28	-7

Objective: To evaluate the impacts of mining activities on forests and rangelands and to develop economical and effective surface mine reclamation techniques.

Program description: This program evaluates the effects of surface mining activities on forest and rangeland resources and on the users of these resources. Research develops, tests and demonstrates new techniques to plan mining operations, to alleviate the impacts of mining on forest and rangelands, and to promptly restore mined areas to productivity.

The Forest Service manages 190 million acres of National Forest System lands, some of which overlay mineral deposits. For example, approximately 50 billion tons of coal are under about 6.5 million acres of National Forest System land. About 45 million acres have potential for oil and gas, and some 300,000 acres have phosphate potential. About 85 percent of National Forest System land is open to exploration and extraction of nonrenewable resources. Many existing and potential problems involved in mining on National Forests and on other forest and rangeland ecosystems are not being addressed by other agencies. Enabling legislation supporting this research includes the National Forest Management Act of 1976 (90 Stat. 2949), Forest and the Rangeland Renewable Resources Research Act of 1978 (92 Stat. 353), and the Cooperative Forestry Assistance Act of 1978 (92 Stat. 365). The following is an example of recent research.

Phosphate Mine Spoils Can Be Revegetated

Overburden spoils from phosphate mines in the West have proved difficult to revegetate because the spoil material is infertile and has steep, unstable slopes, high surface temperatures, low precipitation, and may be subjected to unauthorized grazing by cattle. A concerted program of research, development, and application over the past 10 years at the Intermountain Station has provided some solutions. As a result, phosphate spoils can now be successfully reclaimed. (See Figure 5.)

Scientists have determined which native and introduced species mixes work best on different sites. Research will continue in an effort to learn the effect of various treatments on plant succession on the sites and on long-term site productivity. Pilot-scale revegetation efforts have been undertaken. The methods developed in the project are now in use by most of the western phosphate mining

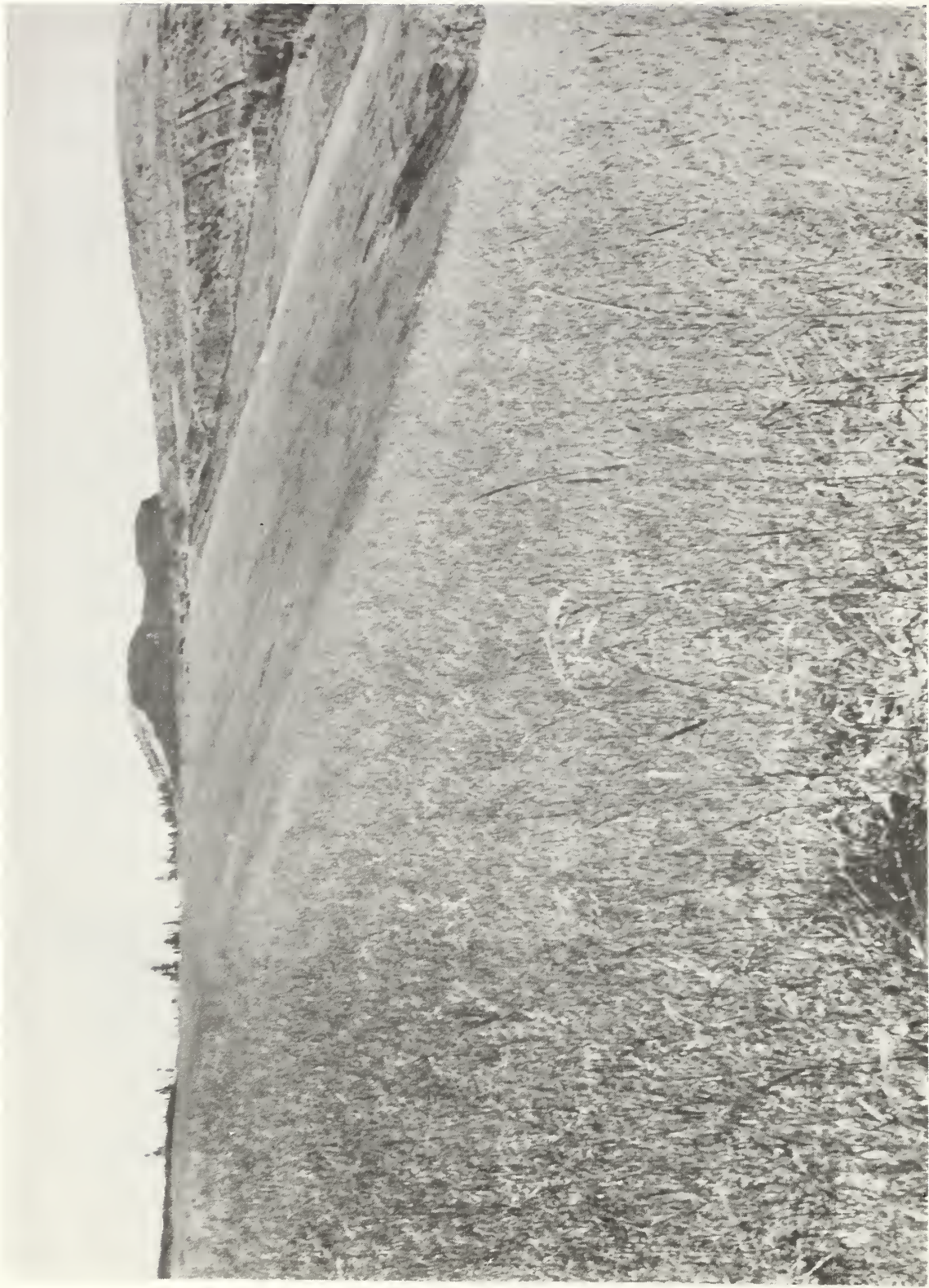


Figure 5. Revegetation research and demonstration areas on a phosphate spoil dump at the Maybe Canyon Mine in Idaho. Vegetation on the area in foreground is two years old. That in the middle background is in its first growing season. Note erosion gullies on steep abandoned spoil dump in right background.

industry; now better than 75 percent vegetative cover in the second growing season can be expected. Scientists also helped decide what various types of equipment to use for revegetation. The equipment was selected, evaluated, and recommended--based on what worked best during the research. Recommendations are passed along to the industry through on-the-job training, technology transfer sessions, reports, and publications.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Surface environment and mining research\$	1,710	1,369	-341
FTE	35	28	-7

A decrease of \$341,000 will result in concentrating efforts on the highest priority mine reclamation problems. The following actions are expected:

- Closeout arid mine reclamation and associated watershed, wildlife habitat and range research in the Southwest with redirection of effort into higher priority activity elsewhere. Expertise and funding to continue needed site-specific applied research are available at the State level through the Surface Mining Control and Reclamation Act of 1977. The unit planned for termination is:

RM-1651 (Albuquerque, NM) Disturbed Site Reclamation in the Southwest

- Reduce selected Forest Service and extramural studies on mined land reclamation that are largely completed in the Intermountain area of the West and in the Appalachians.

In summary, this action will result in closure of one research work unit.

Object class information:

Salary	-167
Travel	-15
Rents, communications and utilities	-10
Supplies, materials and equipment	-25
Other contractual services	-124
Total	-341

Trees and Timber Management Research

		1982 <u>Actual</u>	1983 Appropriation enacted to Date (Dollars in thousands)	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Total	\$	20,710	19,856	20,484	19,711	-773
	FTE	539	470	470	448	-22

Objective: To develop improved silvicultural alternatives and management guidelines needed to increase the productivity and multiple-use benefits of forest lands, maximize the growth and quality of forest plantations, and maintain the productivity of the land as required in the National Forest Management Act of 1976.

Program description: The Forest Service expects long-term national demand for wood fiber, especially softwood, to increase, while a decreasing forest land base, declining volumes of western old growth, losses to insects and diseases, and environmental constraints will tend to reduce available timber for harvest. More timber must therefore be produced on fewer acres to meet demands without raising real prices. Achieving higher productivity from forest lands depends upon the development of economical and environmentally acceptable forest management practices. Much of the eastern forests are in nonindustrial private ownerships, where the regeneration of cutover stands to desired species (e.g., loblolly pine in the South), the control of unwanted vegetation, and the improved use and management of high-value hardwoods offer major challenges to the manager. On public and other large western ownerships, the principal challenges are to harvest and regenerate the "old growth" efficiently and convert brush fields and other nonstocked areas to conifers. Multiresource management practices that focus on timber, wildlife, water, and range production objectives are needed by all classes of landowners and managers.

Timber management research ensures that the information and technology necessary to achieve full productivity are developed and promptly made available. The program focuses on development of cost-effective and reliable regeneration systems; environmentally sound controls for unwanted vegetation; silvicultural strategies to improve the growth, quality, and composition of developing stands; genetic selections for rapid tree growth, high quality and resistance to forest pests; and computer models that predict the growth and yield of forest stands as a basis for management and investment. Basic research is conducted to understand the physical and biological factors that control the development of individual trees and forest stands.

This research program develops and refines the array of reforestation and cultural practices needed to increase the productivity of softwood forests in the West and South and hardwood forests throughout the Eastern United States. Examples of recent accomplishments are described below:

Estimating Forest Production In Response To Stand And Pest Management

Managers of public and private forest lands in the inland Northwest are using an improved computer model, Prognosis Model for Stand Development, to predict how forests will respond to silvicultural practices. Since the model's introduction, several improvements have been made: (1) additional silvicultural treatments have been included; (2) the capability to evaluate damage by Douglas-fir tussock moth has been added; (3) the geographic range of usefulness has been increased; and (4) economic analyses have been improved. Yield forecasts from this system are used to prescribe stand treatments and schedule harvests in intensively managed forests.

Combining the Prognosis and Douglas-fir Tussock Moth computer models enables managers to translate levels of defoliation into long-range forecasts of anticipated timber harvest volumes and gives them a more precise way to compare alternative strategies for integrated pest management. (See Figure 6.)

Development of the stand prognosis computer models has been made possible because of earlier research performed in several locations. The basic model for stand development was developed by the Intermountain Station. The tussock moth outbreak model was developed by the Pacific Northwest Station and Oregon State University, and the two models were linked by the Intermountain Station as part of the USDA Expanded Douglas-fir Tussock Moth Research and Development Program.

Access to computer systems is required to use the models, but managers without a computer can use the system through several State University Cooperative Forestry Extension Services.

Computer Prescriptions Developed For Allegheny Hardwoods

At the Northeastern Station, researchers have developed a computer program to analyze data and make silvicultural prescriptions for Allegheny hardwood and oak forests in Pennsylvania and New York. The program uses research data on overstory, understory, and site factors collected for more than 10 years. This information, along with silvicultural guidelines, is used to produce a recommended stand prescription complete with detailed instructions on how to apply it.

In addition to tabular data, a narrative description of the stand and the rationale for treatment is developed, thus making it especially valuable to foresters working with landowners who lack forestry training. The program facilitates management of various sizes of ownerships and insures that recent silvicultural guidelines are used and properly interpreted. The program is a timesaver for the professional forester who can pass the prescriptions along to landowners in a form they can use.

The program is being used by several organizations: Hammermill Paper Company, Pennsylvania and New York State forests, the Monongahela, Allegheny, and Wayne-Hoosier National Forests, and other industries and consultants. The program is available through the cooperative extension service of state universities in Pennsylvania and New York.



Figure 7. Photo on the left shows a southern pine tree reproduction cutting shortly after the seed-tree cut was made. Photo on the right shows the same area approximately 15 years later and immediately before the removal of the seed-trees.

Low-Cost Alternatives for Regenerating Mixed Stands of Loblolly and Shortleaf Pine in the South

Timber production can be increased on private nonindustrial properties in the South, if low-cost silvicultural and timber management alternatives are available.

The Southern Station reports results of a long-term study of four silvicultural methods to naturally regenerate stands of loblolly and shortleaf pine. The cutting methods included two even-aged management systems (seed-tree and clearcutting) and two uneven-aged systems (selection and diameter-limit cutting). The results are good news for forest managers: all four methods can provide adequate, low-cost regeneration. (See Figure 7.) So far, seed-tree and diameter-limit cutting methods produced significantly more cubic-foot volume than did selection cutting and clearcutting. Clearcutting resulted in significantly less board-foot volume. Board-foot volume production among all treatments will probably equalize as time goes on because many trees on clearcut areas are just reaching saw-log size. All four cutting methods have an advantage over artificial regeneration methods: lower establishment cost.

Natural regeneration guidelines have been prepared. They discuss basic principles of managing for natural reproduction, pros and cons of each cutting method, and "how to" instructions for various timber stand situations. The guidelines are being used by foresters throughout the South to help private nonindustrial forest landowners put a significant number of acres under management that would otherwise have remained unproductive because of the high cost of establishing and managing plantations.

Forest Intensified Research (FIR) Program in Southwestern Oregon Continues to Yield Results

An estimated 1 million acres of forest land in southwestern Oregon are very difficult to harvest or regenerate using today's technology. On Federal lands alone, as much as 177,000 acres may be removed from the timber base because of harvesting and reforestation problems. In 1978, a cooperative 10-year research program was initiated to accelerate development and implementation of reforestation and stand management technology for southwestern Oregon. Cooperators include the Forest Service, Bureau of Land Management, the Oregon and California (O&C) counties of southwestern Oregon, forest industry, and several universities.

One phase of the program, now in its fourth year, is designed to apply existing knowledge and technology. A second phase is directed at unsolved problems and information gaps. This fundamental research phase, funded jointly by the Forest Service and the Bureau of Land Management, just completed its third year of operation in 1982. Several dozen studies are underway by scientists at the Forest Service's Pacific Northwest Forest and Range Experiment Station and Oregon State University (OSU). The research encompasses reforestation systems, site classification, young stand management, tree improvement, and growth prediction.

One Fundamental FIR project conducted by OSU scientists has evaluated the effectiveness of various treatments designed to ameliorate the micro-environmental

extremes that conifer seedlings are subjected to in new plantations. For example, shadeboards placed on the south side of recently-planted seedlings reduced peak soil temperatures compared to east and west orientations, or to conventional scalp treatments without shadeboards. Thus, properly placed shadeboards should enhance seedling survival on hot, dry sites in southwest Oregon.

Another Fundamental FIR study involves a classification scheme for vegetation in southwest Oregon. Scientists at the Pacific Northwest Station have described the ecological conditions for over 4,000 plots across the region, leading to a stratification of vegetational zones (known as series and associations) based on climate, ecology, soils, and topography. This information will ultimately permit the development of detailed management guides for southwest Oregon, based on inherent site productivity and limitations.

The work is closely coordinated with the technology adaptation and transfer phase, including joint installation of a series of comparative trials of shelterwood and clearcut systems of harvesting and reforestation. A number of fundamental studies will be superimposed within these relatively large tests to more intensively investigate specific items such as site preparation benefits, planting stock type performance, micro-climatic influences, and vegetative competition. Results from operational-scale trials such as this should aid the selection of appropriate methods for regenerating difficult sites in southwestern Oregon.

Forest Service and BLM funding for 1982 and 1983 and estimated funding in 1984 are:

	<u>1982</u>	<u>1983</u>	<u>1984</u> <u>Estimated</u>
	(dollars in thousands)		
Forest Service	1,150	1,000	900
Bureau of Land Management	<u>960</u>	<u>960</u>	<u>720</u>
Total	2,110	1,960	1,620

The State of Oregon and private companies also provide financial support for the FIR program.

Decrease for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Decrease</u>
Trees and timber management research\$	20,484	19,711	-773
FTE	470	448	-22

A decrease of \$773,000 will result in: (a) concentrating research effort on the highest priority problems, and (b) accelerating closeout of research near completion. These actions include:

- Closeout research on low quality hardwood management in the Cumberland Plateau-Highland Rim region. The economic and environmental importance of

this program is significantly less than that of silvicultural research on the almost 113 million acres of pines, and bottomland hardwoods in the South. The unit is relatively isolated from major research centers and the lack of funds will reduce the staff below a critical level. The unit planned for termination is:

SO-1105 (Sewanee, TN) Integrated Resource Management in the Cumberland Plateau Region

- Closeout research on hybridization and evolution of forest trees. Due to the loss of the incumbent scientist, the necessary talent will not be available to maintain the program; the funding will not be redirected into areas of research. The unit planned for termination is:

PSW-1499 (Berkeley, CA) Hybridization and Evolution of Forest Trees

- Closeout research on silviculture of ponderosa pine and interior Douglas-fir in the Intermountain Region. Several areas of this research have been completed and efforts can be redirected into more productive forest types in the Northern Rocky Mountains. The unit planned for termination is:

INT-1208 (Boise, ID) Silviculture and Management of Interior Ponderosa Pine and Douglas-fir Ecosystems.

- Closeout research on genetics of Northeastern trees. The most productive opportunities for genetics research in the Northeast--hybrid poplars and the pitch x loblolly pine hybrid--have been exploited. The unit planned for termination is:

NE-1401 (Durham, NH) Genetic Improvement of Northeastern Trees

- Closeout research on biological diversity in Southeastern forests. Work on a computer program to simulate multiple-use alternatives is essentially complete and is ready for transfer to users. Remaining funds will strengthen higher priority research in pine and high quality hardwood silviculture. The unit planned for termination is:

SE-1119 (Durham, NC) Biological Potential for Timber Production

- Reduce or delay research on timber-wildlife management in loblolly pine forests; management of conifer plantations in Puerto Rico, Sierra Nevada mixed conifers, interior mixed conifers of the Pacific Northwest, hardwoods of interior Alaska, difficult sites in southwestern Oregon (FIR), and southern pines on small ownerships; growth models for southwestern conifers; genetic improvement of southern pines, northern conifers, Pacific Coast conifers, and selected fine hardwoods; impacts of acid rain on tree physiology; and effects of mycorrhizae on seedling establishment.

In summary, research will be completed or closed out in approximately five research work units and one location (Sewanee, TN) will be closed.

Object class information:

Salary	-600
Travel	-28
Rent, communications and utilities	-19
Supplies, materials and equipment	-39
Other contractual services	-87
Total	-773

Watershed Management Research

	1982 <u>Actual</u>	1983 Appropriation enacted to Date (Dollars in thousands)	1984 Base	1984 Estimate	Inc. (+) or Dec. (-) <u>from Base</u>
Total	\$ 9,555	9,001	9,276	8,408	-868
	FTE 236	200	200	180	-20

Objective: To develop and evaluate methods and techniques for protecting, managing, and improving forest and rangeland watersheds.

Program description: This research identifies methods to help planners and managers meet long-term water quality and flow needs. Forests and rangelands in the contiguous 48 states yield about 1.3 billion acre-feet of water every year, but this yield could be increased through improved vegetation- and snow-management techniques. Such technology is being developed and transferred to users. This research also identifies means and costs to increase water yields in water deficient areas and determines how to treat watersheds to reduce flood losses. About 175 million acres of our land are flood prone, and better runoff control from flood sources and reduction of flood hazards downstream is needed. The effects of acid rain on vegetation, soils, and aquatic habitats also are being determined. Appropriate land management strategies or treatments to mitigate these effects are being evaluated for costs and effectiveness.

Watershed management research is providing ways to improve water yield from forest and rangeland by managing blowing snow and manipulating vegetative cover to reduce evapotranspiration. Methods are being sought to improve water quality from forest and rangeland by reducing erosion and stabilizing flows from disturbed sites such as gullied land or abandoned mine land. New technology is being developed to reduce nonpoint water pollution through improved fire protection, road design and construction, and land management. Forest lands produce about 65 percent of the total streamflow and much of our forest and rangelands would benefit from watershed improvement practices. Specific treatments depend on the benefits desired: yield improvement, quality improvement, or flood prevention. Ways to reduce flood damage by managing vegetative cover and reducing the threat of large fires are being planned. The role of natural structures such as logs in the stream or streamside vegetation that regulate the release of flood flows or reduce sediment load are being studied.

Forest Service research supports watershed management requirements in the Forest and Rangeland Renewable Resources Planning Act of 1974 and subsequent amendments, and the Acid Precipitation Act of 1980. Examples of recent watershed research follow:

Erosion In The Devastated Area Of Mount St. Helens

Within weeks of the 1980 Mount St. Helens eruption, scientists from the Pacific Northwest Station started studying erosion in the devastated forested areas. Designed to assist Federal, State and local agencies concerned about watershed problems, the research has shown that:

- Salvage logging of damaged timber reduces surface erosion. By mixing new volcanic deposits with old soil, infiltration rates are increased and overland flow of water is decreased.
- Depending on the depth and location of volcanic deposits, erosion from hillsides may be either a minor or major source of sediment.
- Before the grasses were well established, artificial seeding had little effect on the initial large amounts of surface erosion during the first heavy rains after the eruption. Success of artificial seeding varied with depth of ash, erosion rate, elevation, and the type of native vegetation present before the eruption. Over most of the blast zone, the plants that came back fastest were those that survived in snowpacks or as rootstocks below the ground surface.

Information from these studies has been shared through briefings, written reports, and training sessions with the Soil Conservation Service, U.S. Geological Survey, and planners from the Gifford Pinchot National Forest and Cowlitz County, Washington. Research results have been communicated and have been important in designing timber salvage and watershed rehabilitation programs. Scientists from Japan and Costa Rica have been particularly interested in the work.

Blowing Snow Doesn't Melt: It Evaporates

Oldtimers on the windswept high plains of the West have long claimed their snow doesn't get a chance to melt, "It just wears out by blowing back and forth." Scientists at the Rocky Mountain Station have now explained these observations. Researchers found that near-constant winds on the high plains relocate most of the winter snowfall. As the tiny broken snowflake crystals are herded over the ground by blizzard winds, many simply evaporate. Using photo-electric particle counters, elaborate electronics, and sophisticated mathematics, the scientists found that about one-third of the snow that falls during a frigid, nighttime blizzard may be lost to evaporation—about 100 times more than if the fallen snow had remained in place. These evaporation losses are serious on the semiarid high plains. Scientists are using their new knowledge of snow physics to design snow fences and other types of structures to trap snow, thereby minimizing evaporation and increasing water available for vegetation or human use.

Water Quality Data Base Developed

A water quality data base developed by the Northeastern Station for the coal fields of eastern Kentucky, West Virginia and Maryland will help predict the effects of surface mining and reclamation activities on streamflow and water quality and may make it possible for many mines to remain open and productive. One hundred twenty-four small watersheds in eastern Kentucky, 118 in West Virginia and 9 in Maryland were sampled monthly for 2 years. (See Figure 8.) Samples were analyzed for the common ions, alkalinity, acidity, pH, nitrogen, phosphorous, trace elements, electrical conductance, turbidity, suspended soils, and solids that will settle out.

The data base can be used to develop mining and reclamation plans that minimize adverse effects on the environment and assist in meeting requirements for permits. Specific users include regulatory agencies, mine operators, reclamation associations, consultants, land-use planners, landowners, and environmental groups.

In related work, scientists conducted a survey of the coal overburden (mineral and vegetation material overlying coal seams) in the Warrior Basin in Alabama in cooperation with the Department of the Interior's Bureau of Land Management (BLM). BLM had been concerned about the potential for toxic elements to leach into water or prevent plants from growing back. But researchers found little toxic material. The information will be useful to BLM in deciding whether to lease Federal coal lands for mining in the Warrior Basin. And it will help decide which plant species to use for revegetation.

Caribbean Foresters Identify Forestry Research Needs

Caribbean foresters met in May 1982 on the island of Saint Lucia for the first joint meeting since 1946. The meeting led to agreement on a number of important tropical forestry issues. This workshop was sponsored by the Southern Forest Experiment Station, the Man and the Biosphere Program, the Ministry of Agriculture of Saint Lucia, and the University of Puerto Rico's Center for Energy and Environment Research. Attendees identified the following tropical forestry needs facing island managers:

- A forestry training course for junior officers in forestry organizations on the islands.
- Better research information on tropical watershed management, management of secondary forests and degraded lands, recovery of forests from catastrophic events, selection of suitable plantation species for Caribbean Islands, and linkages among forests and uses of upland and coastal ecosystems.
- Technology for watershed management in steep and wet tropical regions.
- Hurricane contingency plans for each island.
- Establish a Society of Caribbean Forestry to exchange new technology and summarize forestry activities on the islands.



Figure 8. Research technician samples stream for water quality.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Watershed management			
research\$	9,276	8,408	-868
FTE	200	180	-20

A decrease of \$868,000 will result in concentration on the highest priority problems and delay initiation of new research. The following actions are anticipated:

- Closeout research on water relations of the pinyon-juniper ecosystems of the Great Basin in Nevada and Utah. The remaining funding will not support a viable unit and will be redirected to Provo, Utah, for research on range ecosystems. The unit planned for termination is:

INT-1753 (Reno, NV) Ecology and Management of Pinyon-Juniper Woodlands in the Great Basin.

- Closeout essentially completed research on small watershed impoundments in the Lake States, rehabilitation of mined land in the Southwest (See SEAM decrease), and geological and engineering studies to stabilize and enhance revegetation of mine spoils in the Appalachians.
- Reduce research on impacts of forest chemicals on water quality, nonpoint source pollution abatement, water yield from aspen forests, nutrient cycling, and acid rain effects on forests and water.
- Delay research on water runoff and quality in the South but analyze data from other studies and prepare management guides.

In summary, these actions will result in one location closure (Reno, NV) and loss of one research work unit.

Object class information:

Salary and	-545
Travel	-25
Rent, communications and utilities	-52
Supplies, materials and equipment	-76
Other contractual services	-170
Total	-868

Wildlife, Range, and Fish Habitat Research

	1982 <u>Actual</u>	1983 Appropriation enacted to Date (Dollars in thousands)	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Total	\$ 9,334	8,486	8,745	8,180	-565
FTE	217	180	180	167	-13

Objective: To develop management techniques and guidelines to maintain or improve wildlife and fish habitat, increase forage production, improve soil stability and vegetation cover, and integrate livestock use with other forest and rangeland resource uses as directed by the Forest and Rangeland Renewable Resource Planning Act of 1974 (P.L. 93-378), subsequent amendments, and Department policy.

Program description: Progress has been made to improve the condition and productivity of the Nation's rangeland, which covers about half the land area. But much remains to be done to sustain current production and to meet anticipated demands. Besides supplying livestock forage, America's forests and ranges provide minerals, water, recreation, wildlife and fish habitat, and protective cover. Developing ways to manage the range resource and enhance wildlife and fish habitat is the main job of this branch of Forest Service research.

Basic and applied research studies are conducted to increase forage production, improve rangeland conditions and enhance wildlife and fish habitat resulting in:

- Forage plants to rehabilitate degraded rangelands.
- Improved social and economic well-being of people and communities that depend on range for their livelihoods.
- Knowledge about specific habitat requirements for wildlife and fish to sustain, enhance and balance wildlife and fish populations in desired locations and numbers.
- Technology to ensure the presence of diverse native and desired nonnative populations of wildlife and fish on the Nation's forests, rangelands, and associated aquatic ecosystems.
- Alternative management guidelines to maintain or increase forage and livestock production, wildlife and fish habitat, and other resource values and uses commensurate with the needs of the Nation now and in the future.

Examples of recent accomplishments are:

Wildlife Books Completed

The Pacific Northwest Station has contributed two major new books on wildlife and wildlife habitat.

"Natural History of Oregon Coast Mammals," General Technical Report PNW-133, published cooperatively with the Bureau of Land Management. This book describes the biology, habits, and life history of the 96 species of mammals found along the Oregon coast. A total of 65 terrestrial and 31 marine species are related to their habitat and the geology, soils, and vegetation of the Oregon coast. The extensive life histories, based on both published and unpublished sources, provide managers with a dynamic view of the habits of the mammals and their habitat.

"Elk of North America: Ecology and Management," edited by a Forest Service wildlife biologist, was published by the Wildlife Management Institute. Twenty-seven specialists contributed to this compendium of the latest scientific information on elk. The history of the elk, including the circumstances of its decline and recovery, is traced. Information in the 698-page book includes physiology, behavior, habitat, relationship to other species, population dynamics, and management practices necessary to maintain elk populations.

These two books are used by resource managers, scientists, and students in the United States and Canada. Because of these compilations, managers can make better use of the existing knowledge to improve resource management practices. Researchers benefit by being able to discern the areas that need additional study.

Aspen Lands--A Challenge For Multiple-Use Management

The 5.5 million acres of aspen in the West are renowned for multiple-use values. Few timber types produce such an array of livestock forage, wildlife habitat, timber, water, and scenery. Future demand for aspen will most certainly increase, particularly for fuelwood. As harvest intensifies, more information will be needed to manage aspen stands and ensure protection of related resource values. (See Figure 9.)

Scientists at the Intermountain and Rocky Mountain Stations are providing basic information on the variability of aspen lands for resource production. Aspen community types have been classified as to composition, productivity, environment, and successional status.

Most aspen stands in the West are subclimax and if undisturbed for a long time will be succeeded by conifer-dominated forests. Such change would reduce forage, plant and wildlife diversity, water yield, and scenic values. Research showed that both fire and clearcutting stimulate aspen reproduction and increase undergrowth that may vary in composition depending on treatment. Clearcutting produced more aspen sprouts but relatively few lasting changes in understory plants. Cattle and deer used aspen clearcuts more than uncut stands, but elk showed no response to clearcutting. Wildlife species that require mature forests were most affected by clearcutting. Clearcutting and associated roads benefit species needing sparsely vegetated areas and forest edges, as well as those favoring tall, dense, shrublike habitats provided by aspen sprouts.

Intermountain Station scientists have developed a computer model to simulate successional changes in the aspen ecosystem following fire or clearcutting. Changes in the vegetation--whether aspen, conifers, shrubs, or forbs--result in changes in multiple-use values. The model is being used to predict alternatives and changes for resource decision makers and researchers.



Figure 9. The aspen lands of the West are valued for their livestock forage, wildlife habitat, timber, watersheds, and scenery.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Wildlife, range and fish habitat research\$	8,745	8,180	-565
FTE	180	167	-13

A decrease of \$565,000 will result in concentrating research on the highest priority problems, terminating research that is largely completed, and reducing or delaying research of relatively lower priority. Anticipated actions include:

- Complete or closeout research on evaluation of multiple range resource outputs in Oregon (Oregon Range Evaluation Project) and wildlife-range vegetation aspects of the arid lands mine rehabilitation program for the Southwest (SEAM program). Research on tradeoffs between timber and wildlife and fish habitat has a greater potential impact on resource productivity than range research in the Pacific Northwest. Many aspects of the range program are nearly completed and limited resources can be redirected into higher priority wildlife and fish habitat research. The project planned for termination is:

Oregon Range Evaluation Project (La Grande, OR)

- Reduce research on old-growth forest wildlife habitat requirements, wildlife habitat relationships to land management strategies, identification of wildlife indicator species, recovery of the Puerto Rican parrot, and coldwater fish habitat in the Southeast.
- Delay research on Southern forest ranges.

In summary, these actions will not result in location closures or research work unit terminations.

Object class information:

Salary	-346
Travel	-20
Supplies, materials and equipment	-43
Other contractual services	-156
Total	-565

Forest Recreation Research

		1982	1983	1984	1984	Inc. (+)
		<u>Actual</u>	Appropriation enacted to Date (Dollars	Base in thousands)	<u>Estimate</u>	or Dec. (-) from Base
Total	\$	2,150	2,077	2,137	1,968	-169
	FTE	50	43	43	39	-4

Objective: Provide both public and private land managers with the technology for more and better high-quality outdoor recreation experiences; and develop knowledge to manage vegetation in and near urban areas for optimum economic, social and environmental benefits.

Program description: Recreation research determines what factors underlie supply and demand for outdoor recreation. Biological and physical site carrying capacities are evaluated to find how to sustain outdoor recreation without resource damage. Management strategies are developed to preserve natural environments while allowing land managers to accomplish other forest management objectives.

Recreation research provides support for decisions on major public investments in forest recreation, helps ensure that appropriate recreation experiences are provided and provides technology to protect resources for future use. Problems regarding the protection, management, and allocation of scarce recreation resources--equity in providing recreation, appropriate fee systems, evaluation of management performance, monitoring recreation supply and demand, and evaluating private-public roles in the recreation market--can be addressed only through a continuing research effort.

Urban forestry research includes studies of the benefits such as noise reduction, improved scenic quality, air quality, and increased property values that urban forests can provide an urban society. This research (1) assesses benefits from urban and community forests; (2) identifies management processes by which urban forests can produce needed benefits (3) develops more efficient ways to manage and protect urban forest resources; and (4) develops methods to integrate urban forest values into comprehensive urban development planning. Forest science brings a unique perspective to problems of managing urban forest resources by treating the urban forest as a multiple-use resource system. Urban forestry research considers the management of all natural resources found in and near urban environments--vegetation, soil, water, air, wildlife--not just "street trees."

Examples of recent accomplishments in both recreation and urban forestry research are:

System Developed To Minimize Recreation Regulations

Some regulations are necessary to manage forest recreation areas but in many cases the regulatory approach leads to strains between visitors and land management agencies. Too many regulations can be counterproductive. Wilderness management, for example, does require some regulation. The real challenge is basically a "soft sell": how to achieve wilderness management objectives and still retain choices not offensive to users.

To help determine whether regulations are necessary or need revision, researchers have developed a seven-step system: (1) identify problem; (2) determine causes; (3) identify and evaluate potential nonregulatory approaches; (4) accept or reject the approaches; (5) identify and evaluate regulatory approaches; (6) accept, reject, or analyze further; and (7) implement and monitor effectiveness and costs.

Do-it-Yourself Trail Registration Successful

For many years, recreation managers have used unstaffed trail registers at trail heads to collect information about trail use. The problem is, not everyone registers. To find out how to encourage more visitors to sign in, North Central Station recreation researchers monitored responses to two types of registration--voluntary and mandatory.

Results showed that the unstaffed stations are indeed effective: people responded equally well to both approaches. But scientists recommend the voluntary approach, with a sign at the station telling people why registration is important. (See Figure 10.) The less obtrusive the approach the better it fits with people's ideas about the outdoor experience.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Forest recreation research\$	2,137	1,968	-169
FTE	43	39	-4

A decrease of \$169,000 will result in closeout of research largely completed and reduction or delay of other research to concentrate effort on the highest priority problems. Cost reducing actions include:

- Closeout nearly-completed research in reducing impacts and costs of managing backcountry recreation resources. Results can be handed off to private and public land managers for implementation. The unit planned for termination is:
NE-1903 (Durham, NH) Dispersed Forest Recreation in Backcountry Areas
- Reduce or discontinue selected research on managing wilderness and wild and scenic rivers, and trends in recreational demand for land management planning.



Figure 10. Voluntary trail registration is successful.

- Delay research on integrating urban forest planning with comprehensive urban development planning.

In summary, these actions will result in the closeout of one research work unit.

Object class information:

Salary and	-108
Travel	-5
Supplies, materials and equipment	-6
Other contractual services	-49
Total	-169

Forest Products Utilization Research

	1982 Actual	1983 Appropriation enacted to Date (Dollars in thousands)	1984 Base	1984 Estimate	Inc. (+) or Dec. (-) from Base
Total\$	17,483	14,758	15,200	15,130	-70
FTE	404	310	310	308	-2

Objective: To provide technology for more efficient utilization of cut timber including all species, whole trees, small trees, and wood wastes; to improve the use and performance of wood products; to reduce costs and energy consumption; and to improve environmental and forest management through the effective use of wood.

Program description: Research is conducted to provide cost- and energy-effective wood structures; to utilize low-value trees, logging residues and dead trees; to produce high-performance structural panels, boards, pulp, paper, alcohols and other chemicals from wood; and to develop wood-processing and preservative systems to reduce wood waste, pollution, and energy consumption.

Basic and applied research on wood now permits an average use of 95 percent of each log brought to the mill compared to 35 percent at the turn of the century. Major research accomplishments have been made recently in plywood, pulp and paper processes and products, preservation of wood in use, engineered wood structures, and containers. Some examples are:

New Technique Speeds Lumber Drying

Conventional kiln drying is a major bottleneck in the process of converting logs to lumber. It takes more time, energy, and money than any other step in wood processing. Scientists at the North Central Station hold a Government patent for an improved process called Pressure Steam Drying, in which lumber is dried under high pressure in superheated steam generated by the lumber. The process is faster, more efficient and cheaper than conventional kiln drying.

In tests using 1-inch-thick yellow-poplar, river birch, silver maple, white ash, and air-dried black walnut and red oak, it took only 20 to 43 hours to dry the lumber to a moisture content of 6 percent, a process that normally takes 5 to 7 days. The surface of the wood darkened somewhat, but degraded less than 3 percent of the total lumber value.

Researchers continue testing other species and thicker pieces. They are also trying to recover energy from the drying process. The byproduct of the process is pure steam which is easier to recover and use for other industrial purposes than the air and steam created by conventional kiln drying.

Basic Research Shows Fungi "Burn" Lignin

Long-term basic research at the Forest Products Laboratory has begun to unravel a mystery that has puzzled scientists for decades: How do fungi degrade lignin, the natural plastic that comprises about 30 percent of wood? With its large and irregular molecules, lignin is a complex compound that would appear to be very difficult to degrade.

From laboratory studies, scientists have found that the fungi chemically oxidize or "burn" the lignin outside the fungal cells, a unique biological phenomenon. Products from the chemical breakdown of lignin are taken up by fungi cells and further digested. Even so, the process is a net consumer of biological energy: the fungi obtain little or no nutrients from the lignin. Apparently, fungi consume lignin to get at the nutrients they need from the wood—either hemicellulose or cellulose.

This important discovery enhances our basic understanding of physiology of fungi and may lead to better ways to protect wood from decay and more effective processes to treat the lignin-bearing waste water from pulp and paper mills.

Construction Guide Promotes Truss-Framed System

A construction manual prepared by the Forest Products Laboratory in cooperation with the National Association of Home Builders Research Foundation provides the information needed to design and build various structures using the Truss-Framed System. The manual answers some common questions about design, fabrication, and installation of the system and recommends manufacturing guidelines and building procedures. (See Figure 11.)

The Truss-Framed System (TFS), developed for house construction by the Forest Products Laboratory, is an innovative system that incorporates floors, walls, and roof into a unitized frame. It overcomes conventional construction weaknesses in the connections between the floors, walls and roof. The result is a less costly, stronger structure better able to survive severe windstorms or earthquakes.

Builders using the TFS produce quality houses that cost significantly less than houses with typical light-frame construction. Savings of 10 percent are commonly reported with TFS and even greater savings can be achieved by combining TFS with other new housing technologies. Savings are mainly obtained by minimizing the time and labor to erect a home. Other advantages can include saving up to 30 percent of structural framing lumber used. To date, builders have constructed more than 1,000 TFS homes throughout the United States.



Figure 11. A recently published construction manual provides information on the Truss-Framed System.

Report Published On Wood Preservatives

The use of wood preservatives to extend the life of wood structures saves about 2.3 billion cubic feet of wood annually in the United States. If the three main wood preservatives--coal-tar creosote, pentachlorophenol, and inorganic arsenicals--were determined hazardous, an additional cost of \$6 billion annually would result as other chemicals were substituted or other structural materials replaced wood.

In 1978, the Environmental Protection Agency asked the Department of Agriculture for help in assessing the risks. The Forest Products Laboratory led an assessment team comprised of 21 specialists from other government agencies and universities. Their 700-page report, "Biologic and Economic Assessment of Penta, Inorganic Arsenicals and Creosote" was completed and is being used by EPA as a basis for decisions regarding reregistration of these preservatives. Copies of the report are also available for sale to the public.

Assessing Utilization Potential Of Forest Biomass

In all regions of the country, Forest Service researchers are looking at the timber resource in a new way, as a potential source of energy. Developing markets for wood as alternate fuel sources offers new opportunities for utilizing logging residues and low-quality trees. But potential users need to know how much fuelwood is available, its location, its characteristics, and how it can be economically harvested. (See Figure 12.)

At the Southeastern Station, scientists have developed techniques for estimating the weight and volume of the total tree and product components, including fuelwood for the southern pines and important hardwoods. The techniques are being incorporated into the Forest Service's forest inventory program for area and regional assessments of total biomass. At the Intermountain and Pacific Northwest Stations, scientists have examined the feasibility and economics of recovering large quantities of wood and bark residues for energy after logging operations.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Forest products utili-			
zation research\$	15,200	15,130	-70
FTE	310	308	-2

A decrease of \$70,000 will result in some unit combinations and a general reduction in program scope. Management actions will be aimed at concentration of effort on the highest priority research. For example, expected actions include:

- Combine two research work units into one new unit to more effectively use available funds and concentrate scientific skills on high priority new problems of more limited scope. The units proposed for termination are:

SE-3101 (Athens, GA) Utilization and Technical Characteristics of
Southern Timber



Figure 12. This old-growth lodgepole pine stand is typical of those being surveyed for potential energy sources.

SE-3501 (Athens, GA) Wood Products Research

In summary, these actions will result in the closure of two research work units and the establishment of one new unit in Athens, Georgia.

Object class information:

Salary	-53
Travel	-2
Other contractual services	-15
Total	-70

Forest Engineering Research

		1982	1983	1984	1984	Inc. (+) or Dec. (-)
		<u>Actual</u>	<u>Appropriation enacted to Date</u>	<u>Base</u>	<u>Estimate</u>	<u>from Base</u>
			(Dollars	in thousands)		
Total	\$	2,939	2,641	2,715	2,715	--
	FTE	55	44	44	44	--

Objective: To provide engineering technology for economic and energy-efficient systems in forestry and land management operations including harvesting, regeneration, transportation, and environmental conservation.

Program description: Research programs are formulated to address specific regional forestry problems. For example, in the Pacific Northwest and Alaska the focus is on improved systems to harvest trees economically and recover logging residues in steep terrain. In the Rocky Mountain area, research addresses the problems of road building and harvesting operations on unstable soils. In the East, harvesting research is conducted on ways to recover and utilize low-grade hardwood trees and logging residues including the economics of harvests on steep slopes. In the South, the primary effort is on harvesting small trees, particularly in plantations. The major thrust is to recover trees and residues that are currently wasted or create land management liabilities. This is extremely important since nearly 180 million dry tons of residue, and cull and small trees are left on harvest sites annually. Examples of forest engineering research follow:

Computers Used In Timber Harvest Planning

Computers are increasingly used in modern forestry to hold down logging costs. Advances in computer technology have enabled researchers to attack the complex problems to select and use specific logging systems. Two new programs have been developed.

PLANS (Preliminary Logging Analysis System) is a group of computer programs developed at the Pacific Northwest Station to quickly prepare cost-effective and thorough timber harvesting plans. PLANS uses computer terrain models to position trial road grades, analyze skyline reach and load characteristics, examine slope and aspect, and view cutting units, roads, and topography in perspective. PLANS is currently being tested by numerous logging engineers on western National Forests, as well as by forest products companies and private consultants. Users report that PLANS is the best available methodology for cost-effective, timber harvest planning.

Another computer planning tool, this one developed at the Northeastern Station, uses the "Weak Link" concept to select the proper number of machines, workers, and operating times so that logging systems are balanced for optimum efficiency. The concept is that harvest production and efficiency is controlled by the least productive or weakest function of the logging system--felling, skidding, loading, or hauling--and that the production rate of all functions should be adjusted to that of the weakest link. The program gives production and cost rates per thousand board feet for each function or for the total system.

The Weak Link program is prepared for hand-held calculators. (See Figure 13.) It is easy to use: a series of prompts appear on the screen to indicate what data to enter, and the answer is given in cost per thousand board feet. The program will be of most use to logging contractors but will also find application in forestry education and extension.

New Topwood Harvester Cuts Down Waste

When northern hardwoods are harvested for sawtimber, an estimated 40 to 50 percent of tree weight above the stump is left in the woods in tops and limbs.

A new topwood harvester has been developed by engineers at the North Central Station in cooperation with the Tennessee Valley Authority. (See Figure 14.) The harvester compacts large tree tops by mechanically severing the limbs. It then aligns the limbs with the mainstem to avoid damaging live trees while skidding (dragging logs from the harvesting site).

The carrier vehicle has a telescoping boom loader with a unique cutter head/grappler that can hold, cut, and load limbs into a U-shaped clamp located at the rear of the machine. The grapple can securely hold material up to 22 inches in diameter, and the rotating auger can cut limbs up to 11 inches in diameter.

Researchers are testing the new harvester to determine cost and productivity under various site conditions. Adoption of this means of harvesting could make available vast amounts of hardwood residues. In the Eastern United States alone, over 50 million dry tons of residue is unused this way each year.

No change for 1984:

All studies and projects will continue at the 1983 level with only the necessary shifts caused by any inflationary impacts.

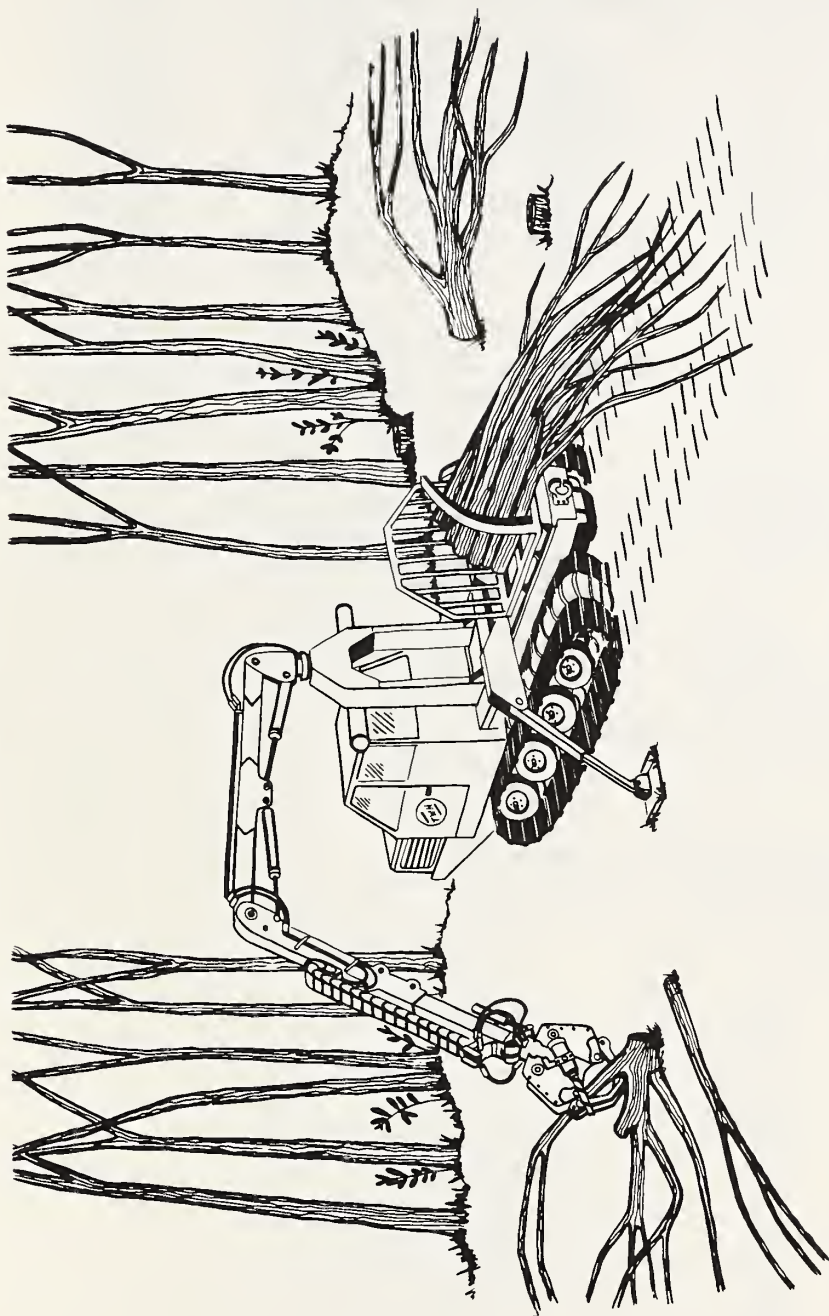


Figure 14. Artist's drawing of topwood harvester processing timber harvest residue.

Distribution of Research Appropriation
by Station and W.O.
1982-1984

<u>Station</u>	<u>1982 Appropriation</u>	<u>1983 Appropriation</u>	<u>1984 Estimate</u>
Pacific Northwest (OR)	15,611	14,924	14,043
Pacific Southwest (CA)	9,100	8,659	8,125
Intermountain (UT)	10,759	10,470	9,690
Rocky Mountain (CO)	9,971	9,064	8,906
North Central (MN)	9,806	9,225	8,827
Northeastern (PA)	16,574	15,806	14,972
Southeastern (NC)	11,222	10,712	10,190
Southern (LA)	13,999	13,042	12,842
Forest Products Lab (WI)	12,788	11,664	11,716
Total Stations	109,830	103,566	99,311
Washington Office	<u>2,315</u> <u>1/</u>	<u>1,455</u> <u>1/</u>	<u>1,455</u> <u>1/</u>
GRAND TOTAL	112,145	105,021	100,766

1/ Includes transfer or reimbursement to other agencies; 1982, \$600,000;
1983, \$475,000; 1984, \$475,000.

FOREST RESEARCH

Program and Financing (in thousands of dollars)

Identification code	12-1104-0-1-302	1982 actual	1983 est	1984 est
Program by activities:				
Direct program:				
1.	Land and resource protection re- search	48,424	47,078	44,243
2.	Renewable resource management and utilization research	61,984	59,594	56,523
	Total direct program	110,408	106,672	100,766
	Reimbursable program	4,025	3,485	3,600
10.00	Total obligations	114,433	110,157	104,366
Financing:				
Offsetting collections from:				
11.00	Federal funds	- 3,929	- 3,400	- 3,514
14.00	Non-federal sources	- 96	- 85	- 86
25.00	Unobligated balance lapsing	1,737		
39.00	Budget authority	112,145	106,672	100,766
Budget authority:				
40.00	Appropriation	112,145	105,021	100,766
44.20	Supplemental for civilian pay raises		1,651	
Relation of obligations to outlays:				
71.00	Obligations incurred, net	110,407	106,672	100,766
72.40	Obligated balance, start of year	27,410	24,572	23,975
74.40	Obligated balance, end of year	- 24,572	- 23,975	- 24,094
90.00	Outlays, excluding pay raise supple- mental	113,245	105,684	100,581
91.20	Outlays from civilian pay raise sup- plemental		1,585	66

Object Classification (in thousands of dollars)

Identification code	12-1104-0-1-302	1982 actual	1983 est	1984 est
Direct obligations:				
Personnel compensation:				
11.1	Full-time permanent	60,899	57,839	54,826
11.3	Other than full-time permanent	4,631	4,804	4,252
11.5	Other personnel compensation	247	256	227
11.9	Total personnel compensation	65,777	62,899	59,305
12.1	Personnel benefits: Civilian	6,893	7,151	6,332
13.0	Benefits for former personnel	115	119	106
21.0	Travel and transportation of persons	3,381	4,007	3,104
22.0	Transportation of things	719	746	660
23.1	Standard level user charges	880	913	808
23.2	Communications, utilities, and other rent	4,607	4,779	4,230
24.0	Printing and reproduction	742	770	681
25.0	Other services	18,635	16,869	18,089
26.0	Supplies and materials	3,458	3,587	3,175
31.0	Equipment	3,662	3,799	3,362
32.0	Lands and structures	318	330	292
41.0	Grants, subsidies, and contributions	663	688	609
42.0	Insurance claims and indemnities	14	15	13
99.0	Subtotal direct obligations	109,864	106,672	100,766

FOREST RESEARCH

Reimbursable obligations:				
Personnel compensation:				
11.1	Full-time permanent.....	1,138	985	1,018
11.3	Other than full-time permanent	276	239	247
11.5	Other personnel compensation	14	12	13
11.9	Total personnel compensation.....	1,428	1,236	1,278
12.1	Personnel benefits: Civilian.....	131	113	117
21.0	Travel and transportation of persons.....	184	159	165
22.0	Transportation of things.....	20	17	18
23.1	Standard level user charges.....	11	10	10
23.2	Communications, utilities, and other rent....	106	92	95
24.0	Printing and reproduction.....	23	20	21
25.0	Other services	1,882	1,130	1,231
26.0	Supplies and materials	133	115	119
31.0	Equipment	107	93	96
41.0	Grants, subsidies, and contributions		500	450
99.0	Subtotal reimbursable obligations.....	4,025	3,485	3,600
ALLOCATION TO THE COOPERATIVE STATE RESEARCH SERVICE				
41.0	Grants, subsidies, and contributions	544		
99.9	Total obligations.....	114,433	110,157	104,366

Personnel Summary

Direct:				
	Total number of full-time permanent positions	2,135	1,926	1,756
	Total compensable workyears:			
	Full-time equivalent employment.....	2,474	2,173	2,008
	Full-time equivalent of overtime and holiday hours.....	10	10	9
	Average ES salary	\$58,500	\$61,122	\$61,122
	Average GS grade	11.80	11.80	11.80
	Average GS salary	\$28,870	\$30,025	\$31,225
	Average salary of ungraded positions	\$19,947	\$20,750	\$21,580
Reimbursable:				
	Total number of full-time permanent positions	38	31	31
	Total compensable workyears:			
	Full-time equivalent employment.....	60	38	38
	Full-time equivalent of overtime and holiday hours.....	1	1	1
	Average ES salary	\$58,500	\$61,122	\$61,122
	Average GS grade	12.40	12.40	12.40
	Average GS salary	\$30,662	\$31,890	\$33,165
	Average salary of ungraded positions	\$17,070	\$17,750	\$18,460

STATE AND PRIVATE FORESTRY

	1982 <u>Actual</u>	1983 Appn. Enacted to date	1984 <u>RPA</u>	1984 <u>Base</u>	1984 <u>Est.</u>	Inc. (+) or Dec. (-) <u>from '83</u>	Inc. (+) or Dec. (-) <u>from base</u>
			(Dollars in thousands)				
Forest Pest Management\$	23,760	27,609	38,380	28,013	17,324	-10,285	-10,689
FTE	400	440	—	440	409	-31	-31
Fire Protection\$	14,193	14,370	39,840	14,425	3,007	-11,363	-11,418
FTE	32	32	—	32	26	-6	-6
Forest Management and Utili- zation\$	22,522	16,849	46,050	17,026	4,727	-12,122	-12,299
FTE	237	162	—	162	81	-81	-81
Special Projects\$	5,080	3,500	7,980	3,524	—	-3,500	-3,524
FTE	19	16	—	16	—	-16	-16
Total\$	65,555	62,328	132,250	62,988	25,058	-37,270	-37,930
FTE	688	650	—	650	516	-134	-134

Appropriation Summary Statement

Budget line items for State and Private Forestry have been changed from last year's Explanatory Notes. The following table illustrates these changes:

<u>Old Budget Line Items</u> <u>(1983 Explanatory Notes)</u>	<u>New Budget Line Items</u> <u>(1984 Explanatory Notes)</u>
- Forest Pest Management	- Forest Pest Management
- Rural Fire Prevention & Control	- Fire Protection
- Rural Forestry Assistance	- Forest Management & Utilization
- Urban Forestry Assistance	
- Assistance in Management, Planning, and Technology Implementation	
- General Forestry Assistance	- Special Projects

Significant reform of State and Private Forestry Programs are proposed in 1984. Direct financial assistance to States through grants and cost-sharing will not generally be provided. States are generally in a better position to assess their priorities in this area and to determine the amount of resources to be allocated. The Federal Government will limit its activities to a more narrow but better defined role. Limited technical assistance on specific matters of national importance will be provided. In addition, national data collection and information dissemination will be continued.

Fifty-eight percent of the Nation's commercial forest land is in nonindustrial private ownerships. This land is important in meeting needs for natural resources, especially timber. Because of increasing demand for timber anticipated overtime, significant shifts in softwood timber supplies among ownerships are projected. According to a 1980 projection, softwood timber production from domestic sources will need to increase from 9.4 billion cubic feet in 1976 to 14.1 billion cubic feet in 2030. Nonindustrial private forest are expected to provide 68 percent of this increase.

Of the 284 million acres of nonindustrial private forest land, 124 million acres contain economic opportunities for intensified management. The cooperative forestry programs of State and Private Forestry provide information and assistance to make landowners aware of the opportunities available.

The cooperative forestry programs are delivered through State Foresters or equivalent State officials in the 50 States plus Guam, Puerto Rico and the Virgin Islands. The programs are authorized by the Cooperative Forestry Assistance Act of 1978 (P.L. 95-313). These programs seek to assist the States in meeting their objectives to:

1. Increase timber supplies, improve waterflows, and maintain fish and wildlife habitat by protecting forests and other non-Federal rural lands from fire.

2. Reduce direct losses of timber and prevent reductions in tree growth and quality of wood products through protection from damaging insects and diseases.

3. Assist landowners, operators, wood processors, and State and local agencies to:

- a. increase timber growth and harvests;
- b. improve efficiency and reduce waste in harvesting, processing and marketing of wood products;
- c. manage forest and range resources for their multiple uses; and
- d. promote rural community development and enhance forest values in urban areas.

Federal budget and tax policies also provide assistance to nonindustrial private forest landowners. Recent tax incentives for timber production should encourage increased production. These include Public Law 96-451, which provides a 10 percent investment tax credit and a 7-year amortization of reforestation costs. Also, the Economic Recovery Tax Act of 1981 reduces income and inheritance taxes thus providing added incentives for some private forest landowner investment.

The proposed budget will reduce Federal personnel requirements by 134 positions. An estimated 1,160 State positions will not be required if States do not place a high priority on the replacement of these funds.

The cooperative forestry programs of the Forest Service are closely related to, but distinct from assistance programs of other USDA agencies. These agencies include the Soil Conservation Service (SCS), the Extension Service (ES), the Agricultural Stabilization and Conservation Service (ASCS), and the Farmers Home Administration (FmHA). An inter-agency agreement on forestry spells out each agency's responsibility with respect to protection, management and utilization of privately owned forest resources and fosters cooperation and coordination among the agencies and their cooperators at National, State and local levels.

State and Private Forestry provides national leadership for the transfer of forestry technology within the Forest Service to outside organizations. The goal is to assist in the productive transfer of forestry research results to enhance the management and utilization of our forest resources.

Authorities:

P.L. 78-412, Department of Agriculture Organic Act of September 21, 1944
(7 U.S.C. 2250)
Section 703

Erect, alter and repair buildings necessary to carryout authorized work.

P.L. 89-106, The Act of August 4, 1965 (7 U.S.C. 2250a)
Section 1

Erection and leasing of buildings, structures, and land from non-Federal sources.

Such sums as are appropriated. No expiration date specified.

P.L. 95-313, Cooperative Forestry Assistance Act of 1978, July 1, 1978
(16 U.S.C. 2101-2110)
Sections 3 and 5-8

Cooperation in forest management and urban and community forestry; insect and disease control; rural fire control; and management and planning assistance.

(05-96) 12-1100 302 SAGR HAGR

Such sums as are appropriated by Congress. No expiration date specified.

P.L. 93-378, Forest and Rangeland Renewable Resources Planning Act, August 17, 1974, as amended (16 U.S.C. 1601 note)
Sections 2, 3, 4, and 5

Forest resources planning and evaluation.

(05-96) 12-1100 302 SAGR HAGR

Such sums as are appropriated by Congress. No expiration date specified.

P.L. 95-495, Act of October 21, 1978, 92 Stat. 1649
Establishing Boundary Waters Canoe Area Wilderness

Section 6(c)(2) \$3,000,000 additional for grants to the State of Minnesota for resource management activities.

Authority for this grant expires in 1991.

P.L. 96-487, Act of December 2, 1980, Alaska National Interest Lands Conservation Act

Section 705(b) \$5,000,000 annually

Such sums as are appropriated by Congress. No expiration date specified.

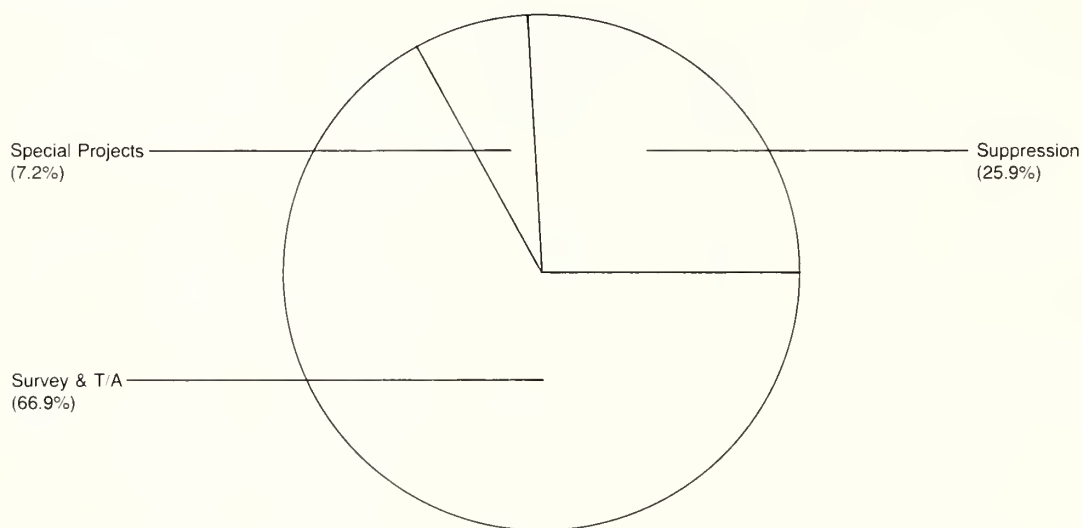
Forest Pest Management

		1983 Appropriation Enacted to Date	1984 Base	1984 Estimate	Inc. (+) or Dec. (-) from Base
	1982 Actual				
(Dollars in thousands)					
<u>Federal Lands</u>					
Surveys and Technical Assistance	\$ 9,389	9,480	9,628	10,918	+1,290
Million acres	148.3	148.3	148.3	154.0	+5.7
FTE	352	352	352	365	+13
Insect and Disease Suppression	\$ 6,064	8,000	8,115	4,486	-3,629
Thousand acres	609.8	NA	NA	NA	NA
FTE	30	70	70	26	-44
Special Projects	\$ 1,774	1,230	1,245	1,245	--
FTE	18	18	18	18	--
<u>Cooperative Lands</u>					
Surveys & Technical Assistance	\$ 3,488	1,899	1,925	675	-1,250
Million acres	512.0	262.7	262.7	32.3	-230.4
FTE	--	--	--	--	--
Suppression	\$ 3,045	7,000	7,100	--	-7,100
Thousand acres	2,100	NA	NA	--	NA
FTE	--	--	--	--	--
Total	\$ 23,760	27,609	28,013	17,324	-10,689
FTE	400	440	440	409	-31

General: The objective of the Forest Pest Management program is to prevent and reduce insect and disease-caused losses with emphasis on integrated pest management. Forest Pest Management's primary roles are to provide technical assistance, technology transfer, and coordination in forest insect and disease detection, evaluation, prevention, and suppression on forest lands of all ownerships.

To accomplish the general objective, the Forest Pest Management program is separated into three categories as shown below. The distribution of funding among these categories for fiscal year 1984 is also shown in this chart:

Forest Pest Management Program



Federal Lands: Surveys and Technical Assistance

Objective: To detect and evaluate insect and disease outbreaks at an early stage to reduce suppression costs and forest resource losses, and to provide technical assistance on integrated pest management, prevention strategies, and proper use and handling of pesticides.

Program description: Provides nationwide support to conduct pest detection surveys and evaluations and reports on pest problems to Federal land managers. Provides technical advice and technology transfer through direct technical assistance to land managers, and activities such as training, seminars, symposiums, and workshops to insure that sound pest management strategies are used in achieving forest resource management goals and that pesticides are not misused.

In fiscal year 1982, 148.3 million acres of Federal forest lands were surveyed resulting in 385 biological evaluations. This accomplishment provided the land manager with information needed to reduce or prevent forest resource losses. Resurveying the same acreage several times is often necessary to provide the land manager with up-to-date information.

Increase for 1984:

	1984 Base	1984 Estimate	Increase
Survey and technical assistance	9,628	10,918	+1,290
FTE	352	365	+13

This increase of \$1,290,000 provides for additional survey and technical assistance activities on Federal lands to reduce the likelihood of insect and disease outbreaks going undetected before forest resource losses occur. Additionally, early detection reduces suppression costs. This increase will promote integrated pest management through consideration of pest management in forest resource planning. This helps reduce the risk of land managers creating

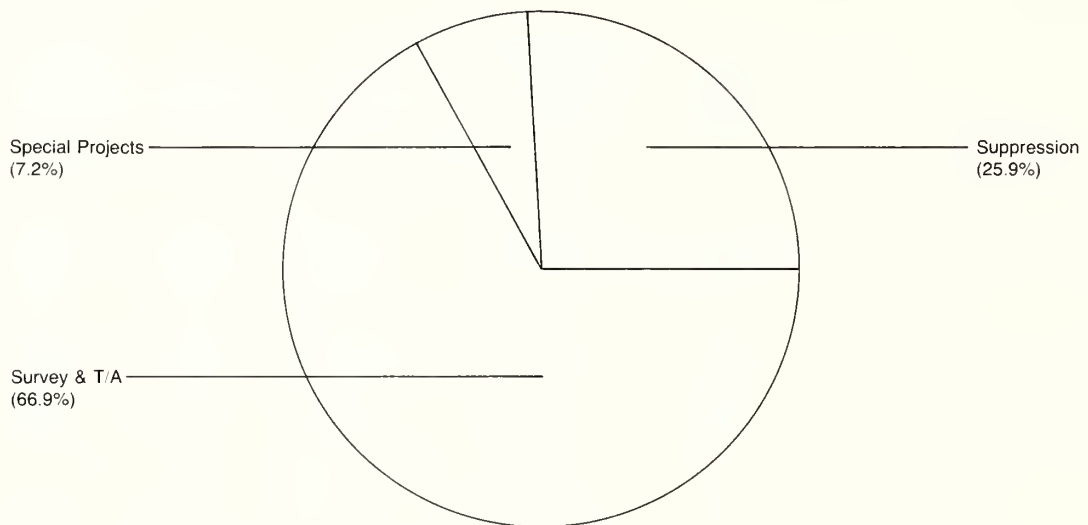
Forest Pest Management

	1982 <u>Actual</u>	1983 Appropriation Enacted to Date	1984 Base	1984 Estimate	Inc. (+) or Dec. (-) from Base
			(Dollars in thousands)		
<u>Federal Lands</u>					
Surveys and Technical Assistance	\$ 9,389	9,480	9,628	10,918	+1,290
Million acres	148.3	148.3	148.3	154.0	+5.7
FTE	352	352	352	365	+13
Insect and Disease Suppression	\$ 6,064	8,000	8,115	4,486	-3,629
Thousand acres	609.8	NA	NA	NA	NA
FTE	30	70	70	26	-44
Special Projects	\$ 1,774	1,230	1,245	1,245	—
FTE	18	18	18	18	—
<u>Cooperative Lands</u>					
Surveys & Technical Assistance	\$ 3,488	1,899	1,925	675	-1,250
Million acres	512.0	262.7	262.7	32.3	-230.4
FTE	—	—	—	—	—
Suppression	\$ 3,045	7,000	7,100	—	-7,100
Thousand acres	2,100	NA	NA	—	NA
FTE	—	—	—	—	—
Total	\$ 23,760	27,609	28,013	17,324	-10,689
FTE	400	440	440	409	-31

General: The objective of the Forest Pest Management program is to prevent and reduce insect and disease-caused losses with emphasis on integrated pest management. Forest Pest Management's primary roles are to provide technical assistance, technology transfer, and coordination in forest insect and disease detection, evaluation, prevention, and suppression on forest lands of all ownerships.

To accomplish the general objective, the Forest Pest Management program is separated into three categories as shown below. The distribution of funding among these categories for fiscal year 1984 is also shown in this chart:

Forest Pest Management Program



Federal Lands: Surveys and Technical Assistance

Objective: To detect and evaluate insect and disease outbreaks at an early stage to reduce suppression costs and forest resource losses, and to provide technical assistance on integrated pest management, prevention strategies, and proper use and handling of pesticides.

Program description: Provides nationwide support to conduct pest detection surveys and evaluations and reports on pest problems to Federal land managers. Provides technical advice and technology transfer through direct technical assistance to land managers, and activities such as training, seminars, symposiums, and workshops to insure that sound pest management strategies are used in achieving forest resource management goals and that pesticides are not misused.

In fiscal year 1982, 148.3 million acres of Federal forest lands were surveyed resulting in 385 biological evaluations. This accomplishment provided the land manager with information needed to reduce or prevent forest resource losses. Resurveying the same acreage several times is often necessary to provide the land manager with up-to-date information.

Increase for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Increase</u>
Survey and technical assistance	9,628	10,918	+1,290
FTE	352	365	+13

This increase of \$1,290,000 provides for additional survey and technical assistance activities on Federal lands to reduce the likelihood of insect and disease outbreaks going undetected before forest resource losses occur. Additionally, early detection reduces suppression costs. This increase will promote integrated pest management through consideration of pest management in forest resource planning. This helps reduce the risk of land managers creating

forest conditions which are conducive to insect and disease problems and reduces the possibility for misuse of pesticides. Integrated pest management is aimed at improving the quality and the long-term efficiency of pest control. These activities are the "backbone" upon which all Forest Pest Management programs, especially insect and disease suppression, are based. Approximately 154 million acres will be surveyed.

This increase will also provide for the expansion of the National Pesticide Training and Certification program for Forest Service employees. Training and certification is needed for about 2,000 Forest Service employees who use or supervise the use of pesticides.

Object class information:

Salary	+307
Travel	+31
Contractual services	+952
Total	+1,290

Federal Lands: Insect and Disease Suppression

Objective: Using integrated pest management techniques, suppress damaging forest insects and diseases to prevent and reduce unacceptable forest resource losses, and maintain forest environments in a healthy and productive condition.

Program description: Forest insects and diseases weaken and kill trees, cause growth loss, site deterioration, and reduce the quality of the forest environment. This program utilizes silvicultural, biological, chemical, and mechanical methods to suppress major forest pests. Examples of current major pest problems are gypsy moth, spruce budworms, bark beetles, and dwarf mistletoe.

During fiscal year 1982, 535,370 acres of National Forest System lands and 74,428 acres of other Federal lands were treated. Evaluation of these suppression activities indicate that approximately 70 million cubic feet of merchantable timber was protected and 9.5 million cubic feet of infested merchantable timber was removed through salvage operations. Also, the degradation of other resource values, such as esthetics, recreation, wildlife, and watersheds, was prevented in the treatment area. Expectations for fiscal year 1984 are that major pest outbreaks will continue and suppression will be necessary to reduce damage and tree mortality.

Decrease for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Decrease</u>
Insect and disease suppression\$	8,115	4,486	-3,629
FTE	70	26	-44

Suppression activities will be limited to the use of conventional pesticides and mechanical treatments to suppress major pests on only the highest value resources. State and private landowners will be responsible for suppression on their lands, except where these lands are intermingled with Federal lands and infestations on the non-Federal lands threaten Federal forest resources or where significant or major pest problems have moved onto State and private lands from Federal lands.

Object class information:

Salary	-1,038
Travel	-104
Contractual services	-1,801
Grants	-686
Total	-3,629

Federal Lands: Special Projects

Objective: To obtain information on pest losses and to bring new or improved technology into use for forest management activities.

Program description: Appraises forest resource losses caused by insects and diseases; determines the value of new technological improvements, materials, methods, or strategies; demonstrates techniques or strategies to improve the efficiency of forest pest management programs; and evaluates the benefits and environmental risks of pesticides of critical importance to forestry under the USDA-National Agricultural Pesticide Impact Assessment Program (NAPIAP).

In fiscal year 1982, special projects were conducted to assess insect and disease losses and implement new or improved technology. Such activities included collection of mountain pine beetle, pine sawfly, gypsy moth, and spruce budworm loss assessment data; demonstration projects for the management of spruce budworms, mountain pine beetle and gypsy moth outbreaks; evaluating effectiveness of pesticides; and continued production of the Douglas-fir tussock moth (DFTM) virus at the Forestry Sciences Laboratory in Corvallis, Oregon.

Special or continuing NAPIAP projects were done to fill data gaps in the areas of environmental effects, human exposure and timber growth yields associated with the use of pesticides in forestry.

No change for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Change</u>
		(Dollars in thousands)	
Special projects\$	1,245	1,245	—
FTE	18	18	—

This requested amount for special projects provides for the highest priority special projects relating to DFTM virus production, NAPIAP activities, and to bring new gypsy moth management technology on line.

Cooperative Lands: Surveys and Technical Assistance

Objective: Detect and evaluate insect and disease outbreaks at an early stage to reduce suppression costs and forest resource losses, and provide technical assistance and coordination on pest management activities.

Program description: Provides a share of the cost for State technical forest insect and disease staffs and associated operating support to conduct pest detection surveys and evaluations and report pest problems and management recommendations to land managers. Staff provide technical advice and technology

transfer through direct technical assistance to land managers, training seminars, symposiums, and workshops, to insure that sound pest management strategies are used in achieving forest resource management goals. This program is called the Cooperative Forest Pest Action Program.

In fiscal year 1982, 512 million acres of State and private lands were surveyed. The results of these surveys provided land managers with information needed to prevent and reduce forest resource losses from pests.

Decrease for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
		(Dollars in thousands)	
Surveys and technical assistance.....\$	1,925	675	-1,250
FTE	—	—	—

Federal cost-sharing for the Cooperative Forest Pest Action Program will not be provided. It is expected that States will continue effective State and private survey and technical assistance programs. The remaining funds shown for cooperative surveys and technical assistance will allow for Federal purchase of State pest condition data.

Object class information:

Grants	-1,250
--------------	--------

Cooperative Lands: Suppression

Objective: Using integrated pest management techniques, suppress damaging forest insects and diseases on State and private lands to prevent and reduce unacceptable forest resource losses and to maintain forest environments in a healthy and productive condition.

Program description: Current major pest problems on State and private lands are gypsy moth, spruce budworms and bark beetles. Federal cost-sharing based on 25% for non-Federal public land; 33-1/3% for industry land; and 50% for nonindustrial private lands has been provided for approved projects and will be continued through fiscal year 1983.

In fiscal year 1982, 2.1 million acres of State and private lands were treated. Evaluation of these suppression activities indicated that 2.2 billion cubic feet of merchantable timber was protected and 133.9 million cubic feet of infested merchantable timber was removed through salvage operations.

Federal cost-share contribution to the States for providing these accomplishments was \$3.6 million. State and private contributions were \$16.2 million.

Decrease for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
		(Dollars in thousands)	
Suppression\$	7,100	—	-7,100
FTE	—	—	—

6. General Fire Prevention. Reduce the number of human caused fires through national programs designed to make people aware of the consequences of wildfire and how they can prevent the unintentional ignition of wildfire.

7. Cooperative Agreements. Assist in the development of cooperative fire protection among governments to provide efficient and effective local geographic area protection through agreements on areas of responsibility, nearest force initial action, shared forces and other techniques.

8. Extreme Fire Situation Assistance. Reduce the cost of (escaped or large fire) suppression by cooperating in management of scarce, specialized fire suppression so that the minimum quantity and minimum cost of such forces is maintained on a national basis.

Program description: The Fire Protection program is designed to use Forest Service technical assistance and cooperation to encourage and assist the delivery by the States of efficient and adequate protection of State and private wildlands. Forest Service participation provides technical information and coordination service for the States.

The \$3,007,000 proposed for this program in 1984 will permit the Forest Service to take action on the highest priority items, such as:

1. Analysis and Management. The Forest Service has an operational evaluation tool, the National Fire Management Analysis System, which uses the cost plus net loss concept to incorporate economic efficiency into fire management decisions. This same process has been adapted to assess the overall efficiency of fire protection on State and private lands, and to assess the efficiency gains of Forest Service participation in such fire protection. Under the title of Analysis and Management three activities will be maintained: (a) the continuing national assessment of adequacy of protection; (b) providing technical assistance to States to apply this technology for their own purposes; and (c) using a standardized version of the system to establish the relative needs among the States and the benefits of Forest Service participation with the States. Priorities for technical assistance to States and for further analysis will be based on results available after completed analysis.

2. Information for Analysis. Consistent historical data and new data will be maintained or developed to provide the basic data needed to continue and improve fire management and to assess accomplishments and opportunities for improved management. Technical assistance will be provided to insure the accuracy of data. Additional data may be required through contracts with the several States.

3. Fire Technology. Technical assistance will be provided to ensure every State has access to the best available technology and to provide States with information not available elsewhere or which can be provided on a national basis in a more efficient manner. Such information includes knowledge of standard wildland fire suppression techniques, management of interagency fire information systems, management of national fire danger rating system, and management of an interagency system of standard personnel qualifications which permit State firefighters to be used in other States. Under contracts some States may develop technology or provide technical assistance to other States. Technology made available through this program can be demonstrated as resulting in a lower total Federal plus State cost than the total of State costs without Forest Service participation. Selection of technology for development or dissemination will be in areas identified as most profitable by the economic analysis of the fire protection from a national perspective.

4. Federal Excess Personal Property. Federal excess personal property is available for loan to States to enhance their fire protection capability at minimum costs. Excess property will be directed to areas with largest potential efficiency gains based on the analysis of fire protection needs. This is a continuing program. In 1982, property worth about \$38 million was transferred to the States.

5. Protection Cost Distribution. The distribution of benefits and costs of State and private wildland fire protection is a continuing concern. The timber, wildlife, water, forage and recreation of these wildlands, both currently and in the future are viewed as having both private and public values. These views result in a variety of cost distributions among the population. Continuing evaluation and assessment of protection costs and benefits using analytical methods will be used to provide leadership in determining fair and efficient distribution of fire protection responsibilities, including the assessment of Federal involvement.

6. General Fire Prevention. This is a continuing nationwide program of fire prevention through education, commonly known as the Smokey Bear campaign.

Decrease for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u> (Dollars in thousands)	<u>Decrease</u>
Fire Protection\$	14,425	3,007	-11,418
FTE	32	26	-6

The decrease of \$11,418,000 will redirect the purposes and objectives of Forest Service involvement with the States' fire protection program. Historically, the basic program was grants of financial assistance to the States, primarily representing a sharing by the Federal government of the cost of fire protection. Grants of financial assistance are eliminated in 1984 and greater reliance is being placed on local units to fulfill their responsibilities associated with their own lands.

Beginning in 1984 the fire protection program emphasizes Forest Service participation in activities which will result in the identification of: the most efficient level of protection; the most efficient mix of presuppression and suppression forces; the most efficient mix of prevention, detection, fuels management and initial attack forces; and the most efficient management of shared suppression reinforcements. Once these efficient standards are established the program is designed to provide the technical assistance necessary to implement those changes necessary to achieve efficient protection.

The decrease in funding eliminates the historical program of grants of financial assistance of the States and some Federal technical assistance. This represents only 3.7 percent of national presuppression expenditures (estimated at \$305 million in 1980).

Action within the objectives of "Cooperative Agreements," "Extreme Fire Situation" and "Support of States Protection" is also deferred. These objectives represent a redirection and reorientation based on the efficiency criterion and the necessity of a central coordinator and facilitator to accomplish the rapid exchange and support necessary for suppression of major fires. Federal employment will be reduced by 6 full-time equivalents. Five of these will be specialists providing professional technical assistance. The other full-time equivalent will be for clerical and general support services.

Object class information:

Salary	-201
Travel	-32
Grants	-11,185
Total.....	-11,418

Forest Resource Management

Objective: To help States improve the forest resources on nonindustrial private lands through assistance in overall forest management, timber harvest activities, reforestation, and timber stand improvement; improve and protect wildlife habitat; develop dispersed recreation opportunities; improve forest range conditions; and improve and protect soil and water resources.

Program description: States provide on-the-ground professional and technical forestry assistance to nonindustrial private forest landowners. In 1982, some 950 State Service Foresters provided assistance and advice to 141,000 woodland owners. This management and resource production service was provided on more than 3.6 million acres of nonindustrial private forest lands.

Decrease for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u> (Dollars in thousands)	<u>Decrease</u>
Forest resource management	7,726	2,177	-5,549
FTE	82	40	-42

The Federal role in helping States provide professional forestry assistance to private nonindustrial landowners is being changed. Federal financial grants to States to defray a small part of State costs are being eliminated. Forest Service technical assistance will be directed at high priority specific problems of national importance.

Most states are expected to maintain resource management, maintain improvements in which they have capital investments and sustain management on State forests. In some cases, maintenance of these efforts may not be of sufficient priority to continue.

The number of Service Foresters who provide technical assistance to private landowners will be reduced. Accomplishments may be reduced, but the degree of reduction will depend on the funding levels provided by the individual State and the response of private landowners to the economic incentives provided by the favorable treatment in the tax code.

Federal employment in Forest Resource Management will be reduced by 42 full-time equivalents. About 34 of these will be specialists providing professional technical assistance. Eight full-time equivalents will be for clerical and general support services.

Federal cooperative forestry personnel in seven field offices will be terminated.

Object class information:

Salary	-1,409
Travel	-205
Grants	-3,935
Total.....	-5,549

Forest Management & Utilization

	<u>1982</u>	1983 Appropriation <u>Enacted</u> <u>to Date</u>	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
	<u>Actual</u>	<u>to Date</u>	<u>Base</u>	<u>Estimate</u>	
	(Dollars in thousands)				
Forest Resource					
Management\$	8,526	7,645	7,726	2,177	-5,549
(Thousand acres planned forest management.....)	3,605	2,709	2,709	550	-2,159
FTE	109	82	82	40	-42
Wood Utilization\$	4,790	2,544	2,570	1,165	-1,405
(Million cubic feet)...	138	85	85	49	-36
FTE	49	28	28	20	-8
Seedlings, Nursery and					
Tree Improvement\$	3,022	2,477	2,500	395	-2,105
(Million seedlings) ..	796	482	482	114	-368
FTE	23	20	20	7	-13
Urban Forestry\$	1,696	1,500	1,515	—	-1,515
FTE	6	5	5	—	-5
Management Improvement \$	4,488	2,683	2,715	990	-1,725
FTE	50	27	27	14	-13
Total\$	22,522	16,849	17,026	4,727	-12,299
FTE	237	162	162	81	-81

General: The Forest Management and Utilization program assists State forestry agencies in improving the production of forest resources on private nonindustrial and non-Federal public forest lands. Specific emphasis has been given to meeting present and projected national needs in timber supply and the production of wood products. The program also has included activities in seedling production, nursery and tree improvement, community and urban forestry, and planning and management assistance.

States have utilized Federal assistance to:

1. Improve management of all forest resources through technical advice and assistance to nonindustrial private landowners.
2. Improve utilization of wood and wood products through technical advice and assistance to loggers and wood processors.
3. Procure, produce and distribute tree seeds and trees and improve and expand State nursery facilities.
4. Develop genetically improved seed through tree improvement programs.
5. Assist local governments to improve management of trees and resources in and near communities and urban areas.
6. Become more efficient organizationally to respond quickly and effectively to local and national needs.
7. Develop planning skills to maximize the use of forest resources for local and national needs.

Wood Utilization

Objectives: Improve tree harvesting, primary and secondary processing, and waste wood utilization through assistance to loggers and processors to extend the forest resource and increase wood industry productivity.

Program description: Activities in forest products utilization help introduce new and existing technologies. Technical assistance to loggers and processors is provided by on-the-ground Federal and State forest products utilization specialists.

The Improved Harvesting Program (IHP) provides on-site evaluations of the efficiency of logging operations and to deliver information on the techniques for implementing permanent quality and process control systems.

The Sawmill Improvement Program (SIP), conducts detailed on-site evaluations of sawmills to provide recommendations for improved efficiency.

During the past year, nearly 1,000 evaluations were conducted in both the Improved Harvesting and the Sawmill Improvement Programs.

In addition to activities in improved harvesting and sawmilling, the utilization program emphasizes activities in secondary processing and drying. Secondary wood processing represents all phases of additional manufacture after the initial product, such as lumber or veneer, has been produced from a tree or log. Drying is the single most troublesome problem involved with satisfactory wood use. Improper drying practices can greatly reduce the yield and quality of lumber production. Thus, in order to meet the demands for high quality lumber, the available timber resource must be unnecessarily harvested to make up for drying degrade losses.

Improved housing technology is another part of secondary processing which receives attention. Substantial gains were made during 1982 in the introduction of the Truss-Framed System for building affordable homes. To date, the system has been used in 14 States where home builders have erected over 1,200 Truss-Framed houses. Cost savings are reported to be as much as 25 percent below that of conventional stick built construction, making Truss-Framed houses available to lower income families.

Another activity in forest products utilization includes the processing of wood made available from formerly unused material; fuels and by-products. Accomplishments in this activity offer major opportunities for the small woodlot owner to manage low value forest stands, a common stand condition in the East.

Decrease for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
		(Dollars in thousands)	
Wood utilization\$	2,570	1,165	-1,405
FTE	28	20	-8

A decrease of \$1,405,000 will maintain technical assistance capability in construction, harvesting improvement, sawmill improvement, and wood use for energy. In Wood Utilization Improvement, special emphasis will be directed toward increasing interaction between national utilization programs and technical service activities of regional and national industry associations. Successful development of such interaction will provide for increase flow of information on productivity improvement concepts and methodology.

Federal employment will be reduced in Wood Utilization by 8 full-time equivalents six of these will be specialists that provide professional technical assistance. Two of the full-time equivalents will be in the clerical and general support service areas.

Object class information:

Salary	-269
Travel	-39
Grants	-1,097
Total	-1,405

Seedlings, Nursery and Tree Improvement

Objectives: To provide genetically adapted and improved tree seed for planting and direct seeding of forest sites through assistance to States and to encourage increased reforestation by assisting States in furnishing quality, reasonably-priced tree seedlings to private landowners.

Program description: This program consists of two interconnected parts. These are:

1. Tree Improvement: This is the application of genetic principles to forest trees to improve:
 - a. Growth rate and form.
 - b. Resistance to insects and diseases.
 - c. Desirable wood characteristics.
 - d. Adaptation to climate or human-caused conditions.

Federal assistance has been provided by cost-sharing State tree improvement operations and delivering technical assistance to States to expedite State tree improvement programs.

Tree improvement work involves selection of superior trees in the forest, collecting seeds, testing the relative performance of the seedlings from these seeds in "progeny tests," and on the basis of the performance of these progeny, selecting the best parental types. The parents are then control crossed to provide superior seed of known parentage and the resultant seedlings are grown in seed orchards. The successful orchard trees provide superior seed (first generation). The improvement is as much as 25 percent for growth traits. Continued intensive selection results in second generation orchards which may produce trees that grow up to 50 percent faster. Once these gains are acquired, they last indefinitely.

2. Tree Nursery Seedling Production: This portion of the program assists States in the production, procurement, and distribution of forest tree seedlings and helps States make needed improvements and expansions at forest tree nurseries. State Forest tree nurseries provide the essential link between the production of genetically improved seed from tree improvement programs and fast-growing plantations on non-Federal forest lands. This program assures that high quality, reasonably priced tree planting stock will be available to private landowners for forest, windbarrier, shelterbelt, woodlot, and other plantings.

Federal assistance has provided:

- a. Cost-share nursery operations in some States with relatively small programs.
- b. Delivery of technical assistance to nursery managers.
- c. Financial and technical assistance in special projects of nursery improvement and equipment development.

State nurseries provide half of all the tree seedlings planted in the United States. The seedlings are used to plant over 600,000 acres of State and private lands annually.

Decrease for 1984:

	1984 Base	1984 Estimate (Dollars in thousands)	Decrease
Seedlings, nursery and tree improvement	2,500	395	-2,105
FTE	20	7	-13

Federal grant assistance to States will not be continued. It is expected that nursery and tree improvement programs in States will continue in most cases depending on individual State priorities. Federal technical service and assistance to States for tree nurseries and tree improvement will be reduced by 13 full-time equivalents. These will consist of 5 specialists, 3 technicians, and 5 clerical and general support personnel.

Object class information:

Salary	-437
Travel	-64
Grants	-1,604
Total.....	-2,105

Urban Forestry Assistance

General: The Urban Forestry Assistance program authorizes matching Federal funds for State forestry agencies to provide technical assistance to local governments for the management of trees, forests and associated natural resources in and near community and urban areas.

Objective: To maximize the contribution urban forest resources make to improvement of soil, water and air quality, loss of prime forest land, additional timber supplies, energy production and conservation, and enhancement of community stability.

Program description: Provides Federal funds through State forestry agencies to encourage management of trees, forests, and associated natural resources in and near urban areas. Target audiences are planners, developers, builders, landscape architects, city foresters, citizen groups, tree service companies, forestry consultants, and homeowners.

Accomplishments are measured in terms of the number of community and urban areas assisted in a given year. In 1982, all 50 States and the territories participated in the program. Over 3,400 of the Nation's urban areas were assisted.

Decrease for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
		(Dollars in thousands)	
Urban forestry assistance	\$ 1,515	—	-1,515
FTE	5	—	-5

Funding will not be provided to continue this program. It is anticipated that States and cities will continue these activities according to their overall priorities. The Forest Service program will continue to provide technical assistance consistent with responsibilities in overall Federal forestry management. Federal employment will be reduced by 5 full-time equivalents. These will consist, primarily, of specialists that provide professional technical assistance.

Object class information:

Salary	-168
Travel	-33
Grants	-1,314
Total	-1,515

Management Improvement

General: Assistance is directed to developing more efficient State forestry organizations and achieving maximum effectiveness of cooperative programs:

1. Management Assistance. Includes organization management, program planning and management, budget and fiscal accounting services, personnel training and management information services, and recordkeeping.
2. Planning Assistance. Reliable data developed through State forest resources planning is essential for preparation of the RPA Program to meet national needs. Until recently, few States have had a long-range forest resources planning process to assess the resource situation and to chart a responsive, coordinated program among concerned State and Federal agencies and the private sector. It is notable that almost all of the States have now embarked on developing a State Forest Resources Plan using a systematic planning process.

Objective: To assist all States to develop and institutionalize systematic State forest resources planning and management processes that will provide national data and increase the efficiency and effectiveness of State organizations.

Program description: State forest resources planning is a continuing effort on the part of the States which:

1. Determines the long-range outlook for forest resource demand and supply.
2. Examines the resource situation, problems, needs and opportunities.
3. Charts responsible public and private programs and policies.
4. Coordinates action among agencies and ownership sectors.
5. Provides forest resources data and analyses for other planning affecting forest lands.

Financial and technical assistance is directed toward developing the State planning processes and analytical capabilities necessary to prepare periodic State Forest Resources Plans. The primary Federal objective is to provide input to the Resources Planning Act. At the same time these activities can contribute to improvement of the State programs.

Financial and technical assistance was provided to almost all States in fiscal year 1982. The financial assistance was provided on an 80 percent/20 percent Federal/State matching basis.

In addition, State and private forestry resource planners participated in Wild and Scenic Rivers studies sponsored by the Department of the Interior at the basic level necessary to ensure Department of Agriculture interests in those studies were properly represented.

Decrease for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
		(Dollars in thousands)	
Management improvement	\$ 2,715	990	-1,725
FTE	27	14	-13

Funding priority will go to States which anticipate completing "first generation" plans in fiscal year 1984 (Montana, Connecticut, New Jersey, New York, Ohio, Vermont, and West Virginia). These "first generation" State Forest Resource Plans supply data to meet the needs of the Resources Planning Act.

The Federal/State cost share ratio for planning assistance will be limited to a 50 percent matching basis.

State and private forest resource planners will continue to participate in Wild and Scenic Rivers Studies sponsored by the Department of the Interior to represent the Department of Agriculture's interest as necessary.

Management Assistance to State forestry agencies, will be discontinued to permit concentration of available funds on State and private forest resource planners to address resource management and protection programs.

Federal employment will be reduced by 5 full-time equivalents in Planning Assistance and 8 full-time equivalents in Management Assistance. These are, primarily, specialists providing professional technical assistance.

Object class information:

Salary and Travel	-473
Travel	-61
Grants	-1,191
Total.....	-1,725

Special Projects

	<u>1982</u> <u>Actual</u>	1983 Appropriation Enacted <u>to Date</u>	1984 Base	1984 Estimate	Inc. (+) or Dec. (-) <u>from Base</u>
		(Dollars in thousands)			
Boundary Waters					
Canoe Area\$	3,688	3,000	3,000	--	-3,000
FTE	2	--	--	--	--
Pinchot Institute for					
Conservation Studies ...\$	470	500	524	--	-524
FTE	16	16	16	--	-16
FIREScope\$	922	--	--	--	--
FTE	1	--	--	--	--
Total\$	5,080	3,500	3,524	--	-3,524
FTE	19	16	16	--	-16

General: Special Projects involve activities that are designed to accomplish specialized objectives usually not available through other Forest Service programs. Current activities include the intensive forest management program associated with establishment of the Boundary Waters Canoe Area Wilderness in Minnesota and the Pinchot Institute for Conservation Studies.

Funding for research and development of FIREScope was discontinued at the end of 1982. However, the Forest Service will participate fully in the operation of FIREScope in California in 1984, from within available National Forest System appropriations. The FIREScope line item is shown here for reference purposes only.

Boundary Waters Canoe Area

Objective: Provide technical and financial assistance to State of Minnesota to implement the Boundary Waters Canoe Area Wilderness legislation.

Program description: The Boundary Waters Canoe Area project provides for an intensive forest management program within the State of Minnesota on State, county and private lands.

Under Section 6 of P.L. 95-495, intensive forest management activities are being concentrated in the five northeastern Minnesota Counties of Lake, Cook, St. Louis, Koochiching, and Carlton to help prevent reduction in the sustained yield of softwood timber. In fiscal year 1982, the State provided \$750,000 that was cost-shared with \$3,000,000 of Federal funds for this effort. Program accomplishments during 1982 included reforestation of 14,500 acres, stand improvement on 7,600 acres, 800 miles of road maintenance and improvement and production of 21 million seedlings.

Decrease for 1984:

	<u>1984</u> <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u> (Dollars in thousands)
Boundary Waters			
Canoe Area\$	3,000	--	-3,000
FTE	--	--	--

The forest intensification program will be discontinued along with the other cooperative forestry grant programs. During the previous four years, \$14,478,000 in Federal funds and \$3,000,000 in State funds were used to mitigate the economic effect resulting from the inclusion of substantial productive areas within the Bounary Waters Canoe Area Wilderness. Significant accomplishments include:

Reforestation (acres)	38,000
Timber Stand Improvement (acres)	23,000
Road Maintenance Reconstruction (miles)	1,600
Increase Utilization of Wood (cubic feet)	3,350,000

Object class information:

Grants.....	-3,000
-------------	--------

Pinchot Institute for Conservation Studies

The Pinchot Institute for Conservation Studies is being discontinued as a Special Project. Funding for the "Pinchot Institute" will be continued and is displayed under the National Forest System -- Recreation Use budget line item.

Geographic Breakdown of State and Private Forestry
(Dollars in thousands)

	1982 <u>Actual</u>	1983 <u>Estimate</u>	1984 <u>Estimate</u>
Alabama	1,012	1,066	8
Alaska	354	313	8
Arizona	203	177	8
Arkansas	712	584	8
California	1,854	1,123	8
Colorado	603	902	8
Connecticut	137	122	8
Delaware	146	132	8
Florida	1,155	925	8
Georgia	967	910	8
Guam	93	94	8
Hawaii	200	183	8
Idaho	362	343	0
Illinois	277	234	8
Indiana	288	238	8
Iowa	173	144	0
Kansas	309	278	8
Kentucky	608	498	8
Louisiana	627	563	8
Maine	1,643	1,559	8
Maryland	481	704	8
Massachusetts	337	280	8
Michigan	656	582	8
Minnesota	4,053	3,485	8
Mississippi	965	876	8
Missouri	622	546	8
Montana	431	386	8
Nebraska	289	261	8
Nevada	257	228	8
New Hampshire	344	413	8
New Jersey	766	1,203	8
New Mexico	361	289	8
New York	715	760	8
North Carolina	1,153	928	8
North Dakota	171	159	8
Ohio	391	341	8
Oklahoma	359	303	8
Oregon	637	1,635	8
Pennsylvania	2,289	1,807	8
Puerto Rico	131	107	8
Rhode Island	341	598	8
South Carolina	855	844	8
South Dakota	405	446	8
Tennessee	699	581	8
Texas	809	730	8
Utah	238	209	8
Vermont	285	365	8
Virgin Islands	64	58	0
Virginia	912	723	8
Washington	631	565	8
West Virginia	428	361	8
Wisconsin	619	557	8
Wyoming	250	326	8
Washington, D.C.....	17	15	0
Payments to States (regular) ...	33,684	32,059	400
S&PF Administration	16,789	14,669	9,432
FPM Administration (Federal lands)	15,082	15,600	15,226
Total Program	65,555	62,328	25,058

STATE AND PRIVATE FORESTRY

Program and Financing (in thousands of dollars)

Identification code 12-1105-0-1-302		1982 actual	1983 est.	1984 est.
Program by activities:				
Direct program:				
1.	Forest pest management	22,479	22,050	17,735
2.	Fire protection	14,273	14,000	3,080
3.	Forest management and utilization	23,126	22,683	4,843
4.	Special projects	4,722	4,635	
	Total direct program	64,600	63,368	25,658
	Reimbursable program	669	660	650
10.00	Total obligations	65,269	64,028	26,308
Financing:				
Offsetting collections from:				
11.00	Federal funds	- 439	- 433	- 427
14.00	Non-Federal sources	- 230	- 227	- 223
17.00	Recovery of prior year obligations	- 590		
21.40	Unobligated balance available, start of year	- 1,409	- 2,971	- 2,288
22.40	Unobligated balance transferred from other accounts	- 50		
24.40	Unobligated balance available, end of year	2,971	2,288	1,688
25.00	Unobligated balance lapsing	33		
39.00	Budget authority	65,555	62,685	25,858
Budget authority:				
40.00	Appropriation	65,555	62,328	25,858
44.20	Supplemental for civilian pay raises		357	
Relation of obligation to outlays:				
71.00	Obligations incurred, net	64,600	63,368	25,658
72.40	Obligated balance, start of year	21,908	18,556	19,300
74.40	Obligated balance, end of year	- 18,556	- 19,300	- 15,543
78.00	Adjustment in unexpired accounts	- 590		
90.00	Outlays, excluding pay raise supplemental	67,362	62,281	29,401
91.20	Outlays from civilian pay raise supplemental		343	14

Personnel Summary

Direct:				
	Total number of full-time permanent positions	501	323	393
	Total compensable workyears:			
	Full-time equivalent employment	665	647	513
	Full-time equivalent of overtime and holiday hours	9	7	6
	Average ES salary	\$58,500	\$61,122	\$61,122
	Average GS grade	11.50	11.50	11.50
	Average GS salary	\$26,295	\$27,350	\$28,440
	Average salary of ungraded positions	\$17,135	\$17,820	\$18,530
Reimbursable:				
	Total number of full-time permanent positions	2	2	2
	Total compensable workyears: Full-time equivalent employment	3	3	3
	Average GS grade	14.20	14.20	14.20
	Average GS salary	\$40,863	\$42,500	\$44,200

STATE AND PRIVATE FORESTRY

Object Classification (in thousands of dollars)

Identification code 12-1105-0-1-302		1982 actual	1983 est.	1984 est.
Direct obligations:				
Personnel compensation:				
11.1	Full-time permanent.....	14,040	13,731	11,182
11.3	Other than full-time permanent.....	1,989	1,764	1,312
11.5	Other personnel compensation.....	210	186	179
11.8	Special personnel service payments.....	2	2	2
11.9	Total personnel compensation.....	16,241	15,683	12,675
12.1	Personnel benefits: Civilian.....	1,823	1,617	1,554
13.0	Benefits for former personnel.....	21	21	18
21.0	Travel and transportation of persons.....	1,975	2,252	1,683
22.0	Transportation of things.....	193	197	164
23.1	Standard level user charges.....	256	262	218
23.2	Communications, utilities, and other rent....	427	437	364
24.0	Printing and reproduction.....	499	511	425
25.0	Other services.....	6,057	5,286	5,160
26.0	Supplies and materials.....	598	612	509
31.0	Equipment.....	641	656	546
32.0	Lands and structures.....	21	21	18
41.0	Grants, subsidies, and contributions.....	35,011	35,068	1,586
42.0	Insurance claims and indemnities.....	3	3	3
44.0	Refunds.....	40	41	34
99.0	Subtotal direct obligations.....	63,806	62,667	24,957
Reimbursable obligations:				
Personnel compensation:				
11.1	Full-time permanent.....	82	84	85
11.3	Other than full-time permanent.....	17	15	11
11.9	Total personnel compensation.....	99	99	96
12.1	Personnel benefits: Civilian.....	9	9	9
21.0	Travel and transportation of persons.....	24	24	23
22.0	Transportation of things.....	1	1	1
23.2	Communications, utilities, and other rent....	1	1	1
24.0	Printing and reproduction.....	17	17	17
25.0	Other services.....	429	421	416
26.0	Supplies and materials.....	4	4	4
31.0	Equipment.....	4	4	4
41.0	Grants, subsidies, and contributions.....	81	80	79
99.0	Subtotal reimbursable obligations.....	669	660	650
ALLOCATION TO THE BUREAU OF LAND MANAGEMENT				
41.0	Grants subsidies, and contributions.....	794	701	701
99.9	Total obligations.....	65,269	64,028	26,308

NATIONAL FOREST SYSTEM

		1983 Appropriation				Inc. (+) or Dec. (-) from 1983	Inc. (+) or Dec. (-) from Base
	1982 <u>Actual</u>	Enacted to Date	1984 <u>RPA</u>	1984 <u>Base</u>	1984 <u>Estimate</u>		
Minerals Area							
Management \$	18,691	22,026	31,790	22,931	27,740	+5,714	+4,809
FTE	578	647	--	647	735	+88	+88
Land Mgmt.							
Activities \$	20,636	18,848	47,100	19,681	16,524	-2,324	-3,157
FTE	658	470	--	470	404	-66	-66
Land Line							
Location \$	25,011	24,610	44,570	25,353	27,593	+2,983	+2,240
FTE	545	504	--	504	549	+45	+45
Maintenance of							
Facilities \$	11,833	13,638	22,860	13,993	13,982	+344	-11
FTE	275	271	--	271	271	--	--
Forest Fire							
Protection \$	142,235	150,063	199,540	155,699	154,738	+4,675	-961
FTE	4,487	4,436	--	4,436	4,386	-50	-50
Fighting Forest							
Fires \$	69,004	1,000	1,000	1,000	1,000	--	--
FTE	(131)	(5)	--	(5)	(5)	--	--
Cooperative Law							
Enforcement \$	3,734	5,145	8,010	5,190	(5,171) <u>3/</u>	+26	-19
FTE	12	14	--	14	14	--	--
Forest Road							
Maintenance \$	65,286	59,535	121,430	61,246	(64,164) <u>3/</u>	+4,629	+2,918
FTE	1,203	1,143	--	1,143	1,197	+54	+54
Forest Trail							
Maintenance \$	11,312	9,785	19,240	10,100	(8,162) <u>3/</u>	-1,623	-1,938
FTE	360	296	--	296	239	-57	-57
Timber Sales							
Adminstr.	<u>1/</u>						
and Mgmt. \$	159,836	158,262	260,360	165,351	192,889	+34,627	+27,538
FTE	5,614	5,287	--	5,287	5,693	+406	+406

		1982	1983	1984	1984	1984	Inc. (+)	Inc. (+)
		Actual	Appropriation Enacted to Date	RPA	Base	Estimate	or Dec. (-) from 1983	or Dec. (-) from Base
Reforestation and Stand Improve- ment	\$	95,611	108,035 ^{2/}	130,890	110,930	(92,434) ^{3/}	-15,601	-18,496
	FTE	2,397	2,575	--	2,575	1,763	-812	-812
Recreation Use	\$	91,180	96,645	158,630	100,050	93,789	-2,856	-6,261
	FTE	2,769	2,793	--	2,793	2,619	-174	-174
Wildlife and Fish Habitat Manage- ment	\$	33,136	32,435	47,580	33,586	33,508	+1,073	-78
	FTE	940	875	--	875	873	-2	-2
Range Manage- ment	\$	27,287	26,368	44,990	27,381	25,492	-876	-1,889
	FTE	834	767	--	767	706	-61	-61
Soil and Water Manage- ment	\$	32,015	28,048	47,910	28,880	27,976	-72	-904
	FTE	860	716	--	716	692	-24	-24
General Administr.	\$	242,290	255,993	314,120	266,331	257,610	+1,617	-8,721
	FTE	6,226	6,092	--	6,092	5,846	-246	-246
Total	\$	1,049,097	1,010,436	1,500,020	1,047,702	872,841	+32,336 ^{4/}	-4,930
	FTE	27,758	26,886	--	26,886	25,987	-899	-899

^{1/} \$1,407,000 reprogrammed from Timber (Helistat) to Forest Pest Management (Gypsy Moth).

^{2/} Deferred to 1984. Reforestation and stand improvement to be financed from the Reforestation Trust Fund in 1983.

^{3/} Budget authority to be financed from 1983 deferral as follows: Cooperative Law Enforcement \$5,171,000; Forest Road Maintenance \$64,164,000; Forest Trail Maintenance \$8,162,000 and Reforestation and Stand Improvement \$30,538,000. The balance of the reforestation and stand improvement program (\$61,896,000) will be financed from the Reforestation Trust Fund.

^{4/} The 1983 proposed deferral (see footnote 3) is included to display program levels. Also includes \$2,290,000 for implementing the Boundary Water Canoe Area Wilderness legislation (P.L. 95-495).

Appropriation Summary Statement

This appropriation provides the funds for the protection and management of about one-third of all Federal land in the United States--the 191 million acres of the National Forest System (NFS) located in 44 states, Puerto Rico and the Virgin Islands. The National Forest System is a national resource which will not only return \$1.4 billion to the Treasury in 1984, but will continue to have major environmental and social value for millions of Americans. A significant portion of the receipts for goods and services from these lands will be returned to the States for distribution to counties (more than \$243 million in FY 1982).

The following examples typify the importance of National Forest System lands to the welfare of the American people:

1. Wood Products. Nearly one-third of the Nation's annual softwood sawtimber harvest comes from NFS lands. A continuous supply of softwood sawtimber is essential to producing the lumber and plywood needed to build homes and for other construction, as well as other wood products. NFS lands contain over one-half of the Nation's standing softwood sawtimber inventory and thus, play a vital role in meeting the Nation's wood product needs in the upcoming decades. Enough wood is sold from NFS lands to build over one million homes annually. This harvest is well within the capacity of National Forests to produce timber on a sustained yield basis in an environmentally sound manner. Reforestation and timber stand improvement activities are carried out to ensure the maintenance of a high level of productivity.

2. Coal, Oil, Gas, and Other Minerals. About one-fourth of the Nation's potential domestic energy resources are on (or under) NFS lands. They include:

- About 50 billion tons of coal, (12 billion of which have potential to be surfaced mined) in the National Forests in Montana, Utah and Wyoming. Production from NFS lands during 1982 was estimated at 13 million tons. Production levels will probably double within the next few years as existing mines increase production and new mines start producing.

- An estimated 25 million acres of NFS lands are under lease for oil, gas, geothermal and other minerals. Over 29,000 operating plans and lease applications were processed and/or administered in fiscal year 1982.

Mineral activity on National Forests and National Grasslands generated receipts of about \$126 million from rents, royalties, sales, and bonus bids in 1982. In this activity Forest Service responsibility is to encourage environmentally responsible exploration and development of mineral resources in cooperation with Department of the Interior agencies.

3. Outdoor Recreation. The National Forests are called "America's Playground," for each year they provide 40 percent of all recreation use of Federal lands. In 1982, the use of the forests for various recreational pursuits amounted to over 233 million visitor days--equal to each American spending over 12 hours somewhere on a National Forest or Grassland. Among the facilities and sites available to them were:

- About 60 percent of the National Recreation Trails System, approximately 3,500 miles, some of which are designed for people with physical disabilities. This system is only a small part of the more than 98,500 miles of trail in the National Forest System.

- More than 4,400 campgrounds

- Many of the commercial ski areas and popular cross-country ski areas, which are located wholly, or in part, on National Forests.

- Nine National Recreation Areas and all or part of 16 National Wild and Scenic Rivers.

- Twenty-five million acres (about 30 percent) of the National Wilderness Preservation System.

Fees paid for recreation-related uses of the National Forests and Grasslands amounted to \$25.3 million in 1982. The Forest Service is exploring opportunities for increasing revenue from recreation use so it more nearly pays its way.

4. Livestock Grazing. More than 15,000 ranchers and farmers pay for permits to graze cattle, horses, sheep and goats on the 102 million acres of grassland, open forests and other forage-producing areas of the National Forest System.

The range program has been reduced, yet the Forest Service will give priority to the manner and degree to which vegetation resources are used. Water quantity and quality, soil productivity and stability, wildlife habitat, forage for livestock, wildhorses and burros, and esthetics are all irrevocably tied to vegetation. The Forest Service will be able to continue to provide forage to promote the economic stability of dependent livestock producers and rural communities at the 1983 level. Where cost-effective some range improvement work will be possible.

5. Hunting, Fishing and Viewing. The National Forests and Grasslands are favorite places for millions of Americans to hunt and fish. In cooperation with the States, the Forest Service manages and improves wildlife and fish habitat to provide wildlife and fish oriented use as well as commercial values. The fresh water lakes and streams of the National Forest System provide a bounty of fish, including trout, bass, and salmon. Sixteen and one-half million fisherman days occur on these lands. A commercial salmon catch valued in excess of \$65 million is harvested annually.

Hunters spend 16.2 million days in the field pursuing large game, such as elk, deer and bighorn sheep; and small game, such as quail, grouse and waterfowl. Bird watchers, photographers and others engaging in nature study spend over 1.5 million days per year enjoying the wildlife and fish resources.

6. Soil, Water and Air. One of the original purposes for establishing National Forests was to secure favorable conditions of water flow. Much of the Nation's water supply flows from these lands located in the headquarters of the

major river systems. In the 11 western States, where the water supply is sometimes critically short and may constrain future growth, about 55 percent of the total annual yield of water is from National Forest System lands. In the eastern States, these lands are often strategically located in the headwaters of important watersheds.

A healthy watershed condition is critical to continued production of goods and services, including high quality water, from National Forest System lands. Watershed condition is a description of the health of a watershed or portion of a watershed in terms of its hydrolic functioning and soil productivity. Soil scientists and hydrologists provide the land manager with information needed to plan and carry out resource management in a manner that assures desired watershed conditions will be maintained or enhanced.

The Forest Service has a dual role in complying with requirements of the Clean Air Act. First, it must conduct its own resource management activities in a way that does not contribute to the degradation of air quality below established standards. Additionally, it is responsible to protect air quality related values, particularly in 88 Federally designated class I (wilderness) areas, from damage which would result from air pollution.

7. Real Estate and Special Uses. A wide variety of real estate activities are associated with managing the National Forest System. Such activities are essential to improving the efficiency of the Agency's land management activities.

- Providing for the needs of other ownerships. The gross area within the National Forest System unit boundaries includes about 39 million acres of land belonging to others, such as private individuals, corporations, or the various States.

- Exchanging land to improve ownership patterns. Land is exchanged at fair market value to improve land ownership patterns. During the last three years, 343,000 acres of non-federal land were acquired in exchange for 212,000 acres of Federal land.

- Locating land lines. Land lines are located to identify legal boundaries between National Forest System and other ownerships. Accurate boundaries are needed to avoid trespass either into or from the National Forest System or private property. Trespass onto public land is increasing by about 2,000 cases annually.

- Purchasing land. The Forest Service purchases land principally for purposes of water flow regulation, timber production, recreation use and the management of wildlife and endangered species. Donations and the acquisition of partial interest, such as scenic easements, are growing in importance in the National Forest System.

- Acquiring rights-of-way. The National Forest System each year acquires nearly 1,000 miles of rights-of-way for access to public land. Ninety-nine percent of the cases are settled through negotiation. Condemnation procedures are rarely needed.

- Asset Management Program. Evaluations of tracts for possible sale where administration can be made more efficient or lands can be utilized more effectively by other owners.

- Small Tracts Act. During past years an estimated 50,000 landowners have innocently encroached on National Forest lands. Each year, the Forest Service will resolve a portion of these cases through sale, interchange of title, or exchange.

- Land Status (including title claims). Land status is the record keeping of the National Forest System managed real estate. This includes partial interest, incumbrances, and use restrictions. Ownership status is essential to efficient management of the resources

- Special Uses. The special uses of the National Forest System are many and varied. With Federal and other government agencies, use is arranged through interagency agreements. For example, military operations are conducted on thousands of acres of NFS land each year. Others gain use of the land by special permit. Between 60 and 70 thousand special uses are authorized by permit, such as for TV antenna sites, private roads, and utility lines. Over \$2.3 million was collected in special land use fees in 1982.

8. Transportation System and Structures. The management of the NFS is supported by the world's largest network of roads and trails under a single jurisdiction--about 293,000 miles of permanent roads at the close of fiscal year 1982. Each year thousands of miles of roads and more than 100 bridges are constructed or reconstructed in the National Forest System--the majority by timber purchasers.

The Forest Service manages 12,000 buildings. Since nearly half of them are 40 or more years old, replacement and maintenance needs are great.

9. Land Management Planning. The National Forest Management Act of 1976 (NFMA) amended the Forest and Rangeland Renewable Resources Planning Act of 1974. It directed the Secretary of Agriculture to develop standards and guidelines for land and resource management planning on the 191 million-acre National Forest System. The NFMA requires an integration of planning for all resources; i.e., timber, range, fish, and wildlife, water, wilderness, and recreation resources, as well as coordination of other resources, such as minerals. The Act requires that integrated land and resource management plans for each administrative unit of the National Forest System (e.g., National Forest) be developed by 1985.

The planning process requires a continuous flow of information and management direction among the three Forest Service administrative levels: national, regional, and designated forest planning areas. Management direction will be based principally upon locally derived information about production capabilities. It will reflect resource needs and conditions pertinent to all levels, and become increasingly specific as planning progresses from the national to regional levels and from the Regions to the National Forests.

There are nine final Regional Guides which will be completed in 1983 reflecting the 1980 Renewable Resources Planning Act (RPA) Program. The Regional Guides will include management decisions in three areas: (1) establishing standards and

guidelines, (2) reflecting goals and objectives of the RPA Program that are consistent with resource capabilities, and (3) displaying tentative resource objectives for each National Forest.

Forest plans for 121 administrative units are under preparation for all lands in the National Forest System. These Forest plans will constitute the land and resource management plans developed in accordance with the NFMA and will include management planning for all resources. Resource inventories will be used to determine the capability or production potential of the Forest lands. This Forest level information will be used in preparing the Forest plans as well as the 1985 RPA Program update. National level RPA objectives, as assigned in Regional Guides, will be evaluated by each Forest to determine if they are compatible with resource supplies, demand levels, economic efficiency, community stability, and potential environmental effects.

Links are being developed on schedule and will tie the current Forest planning effort with the 1985 RPA Program update. The tie with program development and budgeting will occur as individual Forests implement their plans and as the 1985 Program is tied to and implemented through the 1986 budget.

The following general requirements outline the linkage between RPA and land management planning at the regional and National Forest levels:

a. The 1980 Program provides national direction and regional output levels to the Regions for development of Regional Guides and Forest Plans. The Regions must meet or exceed the RPA output levels unless negotiated with the Chief of the Forest Service.

b. The Regional Guides disaggregate the regional 1980 RPA output levels to individual National Forests.

c. The National Forests will develop their Forest alternatives in conformance with the NFMA regulations, the Chief's direction, and the direction contained in the Regional Guide. The 1985 RPA Program development process also provides direction to the Forests on information and analysis requirements.

d. The National Forest preferred alternatives must meet or exceed 1980 RPA output levels from the Regional Guides unless negotiated with the Regional Forester.

e. The 1985 RPA Program will be based on data from Forest planning, State forestry resource planning, and research planning.

f. The Regions will use Forest alternative information to build regional alternatives. The regional alternatives will be the information base for development of national alternatives and a preferred national program.

g. The approved 1985 RPA Program may necessitate revision or amendment to the Regional and Forest Plans.

Actual and projected accomplishments include:

	FY 1982	FY 1983	FY 1984
Plans to be prepared under NFMA:			
Draft Forest Plans (121 admin. units)	14	86	21
Regional Guides	9 (draft)	9 (final)	
Total Costs (Thousand dollars)	\$22,800	\$22,500	\$20,510

LAND MANAGEMENT PLANNING
FUNDING HISTORY

	FY 1982	FY 1983	FY 1984
<u>National Forest System</u>			
Minerals area management	775	950	976
Land exchange & adjustment	--	--	7
Land classification, status, & planning	--	--	66
Forest fire protection	4,265	3,320	4,028
Timber sales administration and management	4,562	5,500	4,370
Recreation use	4,282	3,600	2,755
Wildlife & fish habitat management	1,122	1,100	1,443
Range management	1,064	1,000	920
Soil and Water Management	<u>1,510</u>	<u>1,200</u>	<u>1,950</u>
Total, National Forest System	17,580	16,670	16,515
<u>Construction</u>			
Forest road construction	4,970	5,400	3,560
Forest trail construction	<u>250</u>	<u>150</u>	<u>155</u>
Total, Construction	5,220	5,550	3,715
Tongass Timber Supply Fund	---	280	280
TOTAL, LAND MANAGEMENT PLANNING	22,800	22,500	20,510

Authorities:

The Act of June 4, 1897, Organic Administration Act of 1897, as amended
(16 U.S.C. 473-478, 479-482, 551)

Section 24

Administrative, Protection and Management
(05-96) 12-1100 302 SAGR HAGR

Such sums as are appropriated by Congress, no expiration date specified.

P.L. 68-575, The Act of March 3, 1925, as amended (16 U.S.C. 555)

Section 5

Purchase of land and acceptance of donations of land.

Such sums as are necessary, not to exceed \$50,000 per fiscal year;
no expiration date specified.

P.L. 75-210, Title III, The Bankhead-Jones Farm Tenant Act of July 22, 1937,
as amended (7 U.S.C. 1010, 1011)

Sections 31 and 32

Land acquisition, exchange and authorities to correct
maladjustments for land utilization purposes.

Such sums as are necessary, no expiration date specified.

P.L. 78-412, Department of Agriculture Organic Act of September 21, 1944
(7 U.S.C. 2250)

Section 703

Erect, alter and repair buildings necessary to carry out authorized
work.

P.L. 81-348, Act of October 11, 1949, (Anderson-Mansfield Reforestation and
Revegetation Act (16 U.S.C. 581j); P.L. 92-421, Supplemental National
Forest Reforestation Fund (16 U.S.C. 516c)

Sections 1 and 2

Reforestation

(05-96) 12-1100 302SAGR HAGR

Such sums as are needed, no expiration date specified.

P.L. 84-979, The Act of August 3, 1956 (7 U.S.C. 428a)

Section 11

Land or interests in land by purchase, exchange or otherwise.

Such sums specified by annual appropriation, no expiration date specified.

P.L. 88-657, Act of October 13, 1964, National Forest Roads and Trails Systems Act (16 U.S.C. 532-538)
Sections 1-7

Construction and maintenance of forest development roads and trails.
(05-96) 12-2262 302 SEPW HPWT SENR HIIA

Such sums as are appropriated by Congress, no expiration date specified.

P.L. 89-106, The Act of August 4, 1965 (7 U.S.C. 2250a)
Section 1

Erection and leasing of buildings, structures and land from non-Federal sources.

Such sums as are appropriated, no expiration date specified.

P.L. 90-583, Carlson-Foley Act of 1968 (43 U.S.C. 1241-1243)
Section 3

Rangeland management, noxious farm weed control

Such sums as are appropriated by Congress, no expiration date specified.

P.L. 92-82, Sisk Act of 1971 (16 U.S.C. 551a); Cooperative Law Enforcement
No specific authorization

P.L. 92-421, Act of September 18, 1972, Supplemental National Forest Reforestation Fund Act (16 U.S.C. 576c-e)

Tree planting and seeding of National Forest lands
Authorization: Section 1; \$65,000,000 annually.

Expires June 30, 1987

P.L. 93-378, Forest and Rangeland Renewable Resources Planning Act, August 17, 1974, as amended (16 U.S.C. 1601 note)

Sections 2, 3, 4, and 5

Forest resources planning and evaluation
(05-96) 12-1100 302 SAGR HAGR

Such sums as are appropriated by Congress, no expiration date specified.

P.L. 94-579, Federal Land Policy and Management Act of 1976 (43 U.S.C. 1751);
Section 401; as amended by P.L. 94-514, Public Rangelands Improvement

Act of 1978, 92 Stat. 1803 (43 U.S.C. 1901-1908)

Sections 5 and 9

Range Management

(05-96) 12-5207 302 SAGR HAGR

Such sums as may be necessary.

P.L. 94-588, National Forest Management Act of 1976, October 22, 1976
(16 U.S.C. 472a-i)
Sections 1-14
Amends Forest and Rangeland Renewable Resources Planning Act of 1974.
(05-96) 12-5204 302 SAGR HAGR
Such sums as are appropriated by Congress, no expiration date specified.
Reforestation - \$200,000 annually

P.L. 95-420, Sikes Act Amendment of 1978, 92 Stat. 921 (16 U.S.C. 6700(b)
Sections 1-3
Cooperative wildlife agreements for habitat improvements.
Authorization: \$12,000,000

Expired September 30, 1981

P.L. 95-495, Act of October 21, 1978, 92 Stat. 1649
Sections 5(d), 6(c) (1-2), 6(d) (1-2), 11(f), 18(e), and 19
Establishing the Boundary Waters Canoe Area Wilderness and Boundary
Waters Canoe Area Mining Protection Area.
Authorization: Section 6(c) (2) \$3,000,000 additional for grants to the
State for resource management activities.
Section 6(d) (1) \$8,000,000 for resource management on the
Superior National Forest.
Sections 5(d), 11(f), 18(e), and 19 such sums as
necessary.

No expiration date specified.

P.L. 96-95, Act of October 31, 1979, Archaeological Resources Protection
Act of 1979 (16 U.S.C. 470aa-ee)
Sections 4-13

Such sums as are specified by Congress, no expiration date specified.

P.L. 96-487, Act of December 2, 1980, Alaska National Interest Lands
Conservation Act
Sections 101-103, 501-507, 703-708, 1201-1203, 1301-1328
Authorization: Section 705(a) about \$40,000,000 annually
Section 705(b) \$5,000,000 annually

Such sums as are appropriated by Congress, no expiration date specified.

P.L. 96-554, Act of December 19, 1980, Wood Residue Utilization Act of 1980
(16 U.S.C. 1681-1687)
Section 8
Pilot projects and demonstrations
Authorization: \$25,000,000 annually through 1986 of which \$2,500,000
of the amount may be appropriated for General
Administration.

Minerals Area Management

	1982	1983	1984	1984	Inc. (+) or Dec. (-)
	<u>Actual</u>	<u>Appropriation Enacted to Date</u>	<u>Base</u>	<u>Estimate</u>	<u>from Base</u>
	(Dollars in thousands/Accomplishments)				
Leasable Minerals \$	7,582	9,378	9,763	11,293	+1,530
Cases completed.....	*	13,048	13,048	10,630	-2,418
Locatable Minerals \$	5,892	7,960	8,287	11,489	+3,202
Cases completed.....	*	6,582	6,582	7,493	+ 911
Common Variety					
Minerals \$	3,160	2,822	2,938	2,875	- 63
Cases completed.....	*	4,870	4,870	3,777	-1,093
Geology..... \$	<u>2,057</u>	<u>1,866</u>	<u>1,943</u>	<u>2,083</u>	<u>+ 140</u>
Total \$	18,691	22,026	22,931	27,740	+4,809
FTE	578	647	647	735	+ 88
Cases completed.....	29,405	24,500	24,500	21,900	-2,600

*Actual data are not available by category. Accomplishments for 1982 are available only as an aggregate for the total minerals program.

General: Satisfying the Nation's need for raw materials to support economic growth depends in large measure on domestic mineral and fuel production from private and Federal lands. Private industry initiates the response to this need and, where National Forest System (NFS) lands are involved, the Forest Service guides and facilitates it.

Under existing laws, Federal mineral and energy resources are categorized as leasable, locatable, and common variety. Depending on the category, the Forest Service evaluates applications or proposals by industry to explore and develop these resources on NFS lands. Based on the evaluations and in cooperation with the Department of the Interior, which has the primary responsibility for management of mineral and energy resources on Federal lands, the Forest Service develops procedures and requirements for minerals activities. This provides coordination with other resource values and uses. When proposed mineral activities would significantly affect the environment, as determined through environmental assessments, the Forest Service prepares environmental impact statements as required by law. Funding for the Forest Service's minerals program also covers special-use (e.g., roads and pipelines) permit issuance and administration when the use is part of a mineral development project on NFS lands.

The principal cooperating agencies of the Department of the Interior are the Bureau of Land Management, Bureau of Mines, and Geological Survey.

The following display shows the estimated workload for the 3-year period 1982-1984:

	1982 <u>Actual</u>	1983 <u>Planned</u> (Number of Cases)	1984 <u>Estimate</u>
Unprocessed cases, start of year	5,201	7,200	5,700
New applications/proposals and operating plan administration	31,404	23,000	23,000
Cases Completed	29,405	24,500 1/	21,900 1/
Inventory, end of year	7,200 2/	5,700 2/	6,800 2/

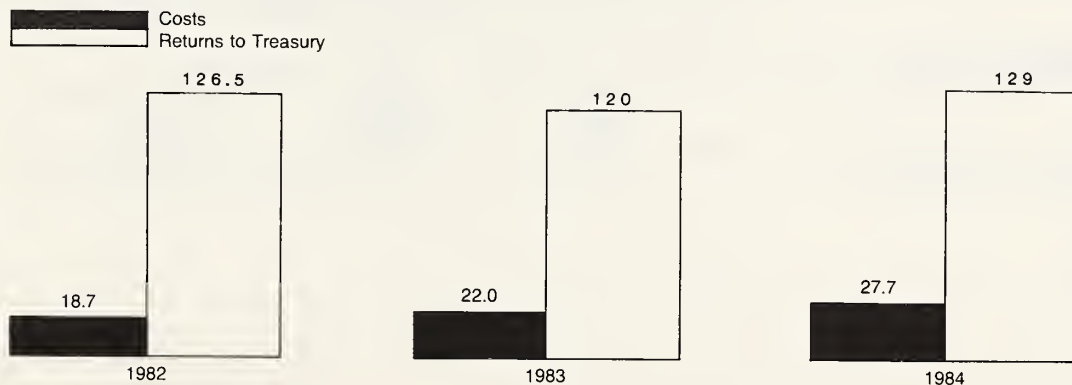
1/ The number of completed cases is expected to be lower in 1983 and 1984 than in 1982. This is due primarily to an increase in the proportion of the total caseload associated with operating plan proposals and administration. This includes extensive on-the-ground work in complex and difficult situations and is generally more time consuming than the processing of lease applications (which has been a significant portion of the caseload in the last few years).

2/ The figures for the end of year unprocessed cases in fiscal years 1982, 1983, and 1984 are higher than previous estimates. This is primarily due to greater than expected numbers of applications and proposals in fiscal year 1982 and an accounting error of approximately 700 unprocessed cases for one Region at the start of fiscal year 1982. Included in the inventory figures are: 1400 unprocessed lease applications in congressionally designated wilderness, 500 in wilderness study areas, 1,000 in RARE II recommended wilderness areas, and 400 in RARE II further planning areas.

The minerals and geology program costs and receipts from rents, royalties, sales, and bonus bids (returns to the Treasury) for activities on NFS lands are shown on the following chart:

Minerals and Geology Program Costs and Returns to the Treasury

Million dollars



1983 AND 1984 RETURNS ARE ESTIMATED.

Geologic information is used to support many Forest Service programs and specific activities including: land and resource management planning, timber sale road construction, mined-land reclamation, watershed management and protection, recreation development, and other facilities construction. The geology program also provides information for evaluation, management, and protection of ground water resources and underground space on NFS land.

Leasable Minerals

Objectives:

1. To protect the surface resources as appropriate during minerals exploration, development, production, and reclamation.
2. To make available the considerable energy and mineral resources within the National Forest System in the most efficient manner possible.

Program description: Leasable minerals include energy minerals (oil, gas, coal, oil shale, tar sands, and geothermal steam), and in addition, hardrock minerals (lead, silver, etc.) occurring on acquired lands. The leasable minerals program involves:

- Assuring that mineral exploration, development, production, and reclamation activities comply with applicable laws and regulations.
- Acting promptly on lease applications and reporting results to the Bureau of Land Management, and providing, through the BLM, stipulations for the protection of surface resources.
- Processing and approving operating plans.
- Protecting surface resources.
- Monitoring mining activities for compliance with operating plan standards.
- Administering special use permits associated with leasable minerals.

Past energy crises have created a national awareness of the need for domestically produced leasable energy minerals. Rising prices of imported fuel, supply uncertainties, and the national objective to become energy self-sufficient have given greater impetus to meeting this need.

Increase for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Leasable Minerals.....\$	9,763	11,293	+1,530

As described earlier, the caseload mix is changing from predominantly lease applications to a greater proportion of higher cost operating plan proposals and operating plan administration. As a result of this evolution to higher-cost cases, the timely processing and administration of a smaller caseload (in absolute numbers, 2,418 fewer cases) will require an increase of \$1,530,000 in funding.

Operating plan administration involves considerable coordination among various staff groups, Federal agencies, and State agencies to (1) review proposed operating plans and develop mitigative measures for surface resource protection, and (2) assure that surface resource protection is accomplished relative to mineral activities. On National Grasslands, coal development activities increasingly involve surface mines, which are generally more complex to administer than underground mines. The 5,700 unprocessed cases estimated at the start of 1984 are primarily in the oil, gas, and geothermal portions of the leasable minerals program. Unprocessed cases at the end of 1984 are estimated to total 6,800.

The planned accomplishments for 1983 are 13,048 applications and operating plans processed and administered. An estimated 10,630 applications and operating plans will be processed and administered in 1984, a decrease of 2,418 cases. The 1984 program will allow for resource coordination and appropriate protection of surface resources during mineral activities. The increase in unit costs is due to the greater proportion of complex cases, i.e., a greater proportion of cases in operating plan administration, compared to the processing of lease applications.

Object class information:

Salary	+ 692
Travel	+ 167
Transportation of things.....	+ 157
Supplies, materials and equipment	+ 141
Other contractual services	+ 373
 Total	 +1,530

Locatable Minerals

Objectives:

1. To increase the availability of locatable minerals to enhance the industrial and economic strength of the United States.
2. To encourage industry proposals for mineral development on public domain lands in the NFS.
3. To develop reasonable and effective measures to protect surface resources and values.

Program Description: Locatable or hardrock minerals, including gold, silver, lead, zinc, etc., are disposed of by the Federal Government under the 1872 Mining Law. A mining operator must file a claim and obtain necessary operating approvals to develop and mine locatable minerals on public domain lands. The locatable minerals program involves:

- Complying with mining laws.
- Protecting surface resources.
- Processing operating plans.
- Monitoring mining activities for compliance with operating plan standards.
- Administering special-use permits associated with locatable minerals.

In response to increasing dependence on foreign sources for a number of minerals of strategic importance, increasing prices, and other economic factors, the locatable minerals workload has steadily increased over the last several fiscal years and is expected to continue to rise during the next three years.

Increase for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Locatable Minerals.....\$	8,287	11,489	+3,202

An increase of \$3,202,000 will facilitate adequate and timely processing and administration of an additional 911 operating plans. This funding will allow the Forest Service to be more responsive to workload caused by accelerating demands for critical and strategic minerals.

Fiscal year 1983 planned accomplishments are 6,582 operating plans processed and administered. An estimated 7,493 cases will be processed in 1984, an increase of 911 cases over 1983. The 1984 program will provide for resource coordination and appropriate protection of surface resources. The increase in unit costs is attributable to a higher percentage of operating plan proposals in complex and difficult situations and corresponding operating plan administration, compared to the processing of lease applications.

Object class information:

Salary	+1,447
Travel	+ 349
Transportation of things.....	+ 330
Supplies, materials and equipment	+ 296
Other contractual services	+ 780
Total	+3,202

Common Variety Minerals

Objective: To determine the availability of common variety minerals and provide for their extraction and use consistent with sound land management practices.

Program Description: Common variety minerals include gravel, sand, and other materials used in the construction of highways and other facilities. These minerals on NFS lands are either sold outright, granted to qualified users, or used on Forest Service road systems and other facilities. The common variety minerals program involves:

- Complying with laws and regulations.
- Responding to lease applications for development of common variety minerals.
- Developing operating plans.
- Protecting surface resources.
- Monitoring developments.
- Administering special-use permits associated with common variety minerals.

The common variety minerals workload has been increasing since fiscal year 1979. However, the recent national economic situation has weakened demand for timber and associated road building as well as needs for other construction materials. Therefore, this program has experienced a cyclical decline.

Decrease for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Decrease</u>
Common Variety Minerals....\$	2,938	2,875	-63

The decrease of \$63,000 will not jeopardize completion of the remaining work, due to the anticipated workload reduction of 1,100 cases. This funding level will allow the Forest Service to be responsive to demands for common variety minerals for activities or projects on NFS lands and for needs off the NFS lands.

This program affects local and State governments and private operators who use sand, gravel, and other materials from NFS lands. Also, it provides materials for construction of roads and other facilities needed to implement the overall Forest Service program. The program is developed based on the demands of other program areas (timber, recreation, and others) for common variety minerals. It also includes projected external needs.

Fiscal year 1983 planned accomplishment total 4,877 operating plans processed and administered. An estimated 3,777 cases will be processed in 1984, a decrease of 1,100 cases. Compared to 1983, there will be an increase in the average unit cost.

The fiscal year 1984 funding is needed to process more complex operating plans and to administer plans that affect more sensitive areas.

Object class information:

Salary	-28
Travel	- 7
Transportation of things.....	-7
Supplies, materials and equipment	- 6
Other contractual services	- 15
 Total	 -63

Geology Program

Objectives:

1. To ensure that geologic factors affecting the safety and cost-effectiveness of Forest Service activities are recognized and addressed.
2. To ensure that geologic and minerals resource information is gathered, evaluated, and provided to support efforts in land management planning, environmental protection, reclamation of mined land, and other agency or State cooperative management programs.

Program Description: This program provides geologic information and support services for all Forest Service activities in land and resource management. This involves:

- Providing geologic support personnel in gathering and presenting information about geologic conditions and mineral resources to be used in overall resource evaluation and land management planning.
- Gathering, interpreting, and reporting geologic factors that effect the design, construction, and maintenance of Forest Service facilities. This includes work such as landslide investigations, foundation studies, and investigations for the location of construction materials.
- Gathering and interpreting geologic information needed for the development and protection of resources such as ground water, underground space, and minerals materials.

Increase for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Increase</u>
Geology.....\$	1,943	2,083	, +140

An increase of \$140,000 reflects greater demand for geologic support services for land management planning, project planning, and environmental protection of the land. Most of the increase in services will occur in land management program support, due to increased needs for complete and accurate geologic assessments.

Object class information:

Salary	+63
Travel	+15
Transportation of things.....	+15
Supplies, materials and equipment	+13
Other contractual services	+34
Total	+140

Land Management

		1982	1983	1984	1984	Inc. (+) or Dec. (-)
		<u>Actual</u>	<u>Appropriation Enacted to Date</u>	<u>Base</u>	<u>Estimate</u>	<u>from Base</u>
			(Dollars in thousands)			
Land Exchange and adjustment.....	\$	6,238	5,885	6,249	4,690	-1,559
Land classification, status and planning..	\$	809	700	718	716	- 2
Special Uses.....	\$	7,392	6,885	7,190	5,576	-1,614
Geometronics.....	\$	<u>6,197</u>	<u>5,378</u>	<u>5,524</u>	<u>5,542</u>	+ 18
Total	\$	20,636	18,848	19,681	16,524	-3,157
	FTE	658	470	470	404	- 66

General: Provide for efficient real estate management of National Forest System (NFS) lands while protecting the resources and securing compliance with applicable air and water quality standards. Activities include land exchange and adjustment, land classification, status, landownership planning, special uses, and geometronics or base series mapping.

Land Exchange

Objective: To improve cost effectiveness of resources management in the NFS by implementing land exchanges and adjustments where lands to be exchanged should be retained in Federal ownership and where such exchanges would reduce management costs and facilitate development and management of NFS and adjacent nonfederal lands.

Program Description: Land exchange results in adjustments of ownership which benefit both the public and nonfederal landowners. All exchanges are made with willing owners. The exchanges result in more efficient landownership patterns that reduce administrative costs of both the Federal and nonfederal lands.

Cost savings occur in resource administration, road management, location, posting, and maintenance of property boundaries; issuance of special-use permits, and resolution of title claims and trespass. In 1982, 207 exchanges resulted in a reduction of 1,500 miles of National Forest property boundary, which could mean a savings of \$8,000,000 in landline location costs.

In the last 3 years, over 500 exchanges were approved, in which 343,000 nonfederal acres have been acquired in exchange for 212,000 acres of Federal land with a total value of \$231,000,000.

Many land exchanges in the western States involve large acreages with States and local governments, railroads, timber and mining companies, and ranchers. The properties often involve alternate "checkerboard" landownership patterns resulting from land grants of 100 years ago. Exchanges in the eastern States generally involve individual landowners with small tracts. Exchanges provide a means of solving problems associated with fragmented ownership. Many exchanges result in assistance to local communities through the exchange of isolated tracts of nonfederal land to the United States in exchange for Federal land adjacent to expanding communities. The land exchange program provides a method of improving landownership patterns with a minimum impact on the Federal budget.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Land Exchange.....\$	6,249	4,690	-1,559
FTE	150	116	-34

A decrease of \$1,559,000 will permit the continuation of a program that will provide for processing approximately 140 high priority exchanges involving 70,000 acres of nonfederal lands in exchange for 40,000 acres of Federal land. Emphasis will be on large acreage exchanges that significantly reduce administrative costs of resource management. Such exchanges consolidate the NFS landownership pattern and reduce the miles of Federal property lines thereby lessening the risk of trespass. Unit costs will be lowered due to more efficient procedures. Consolidation will also reduce the need to purchase land to meet specific management needs. The improved landownership pattern will reduce the administrative cost of special-use permits authorizing nonfederal use of NFS land. Land exchanges also benefit the private sector and local governments by making land available for development and expansion of communities and businesses on lands that are better suited for other than Federal uses.

Object class information:

Salary	-870
Travel	-49
Transportation of Things.....	-56
Supplies, materials and equipment	-160
Other contractual services	-424
Total	-1,559

Land Classification, Status and Planning

Objective: To determine which tracts of land should be considered for addition to or deletion from the National Forest System to better achieve overall management objectives, to maintain status of landownership or interests in land, to complete interagency land transfers and interchanges and to resolve encroachments and title claims.

Program description: Changes in landownership patterns can make administration more economical, further management objectives for protection and development of the area involved, and increase the supply of goods and services. The program enables the Forest Service to: (1) participate with the State of Alaska and Alaska native corporations on development of effective land selection programs, (2) identify lands within the National Forests which are unsuitable or inefficient for National Forest management and should be considered for disposal via land exchange, transfer to other Federal agencies' jurisdictions or sale, (3) resolve trespass title claims, and (4) identify lands within the National Forests which should be acquired.

Land status is the activity that maintains basic land information as to origin of ownership which identifies use restrictions and encumbrances. Among other things, it is used in computing the Forest Service 25 percent fund payment to States and Counties and Bureau of Land Management Payments in Lieu of Taxes (PILT) entitlements.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Land Classification,			
Status and Planning...\$	718	716	-2
FTE	16	16	—

A decrease of \$2,000 from the 1984 base provides for the continuation of the program to maintain landownership records in a condition that will provide accurate information on the current status of National Forest land.

Object class information:

Supplies	-2
Total	-2

Special Uses (non-recreational)

Objective: To carry out the permit program for authorizing the use of National Forest System lands by Federal, State, and local agencies, as well as private industry and individuals. Authorizations for use are included in 13 specific acts of Congress listed in 36 CFR 251.53.

Program description: The workload for the program is externally generated, without Forest Service control over the number of applications received for use of National Forest System lands. Processing of applications involves preparation of environmental reports, field examination of proposed sites, drafting of appropriate permit terms, and conditions and determination of fees to be charged. Utility and road rights-of-way are examples of uses for which easements are commonly issued. Once a permit or easement is issued, inspection and monitoring is required to assure its terms are met.

Approximately 48,000 non-recreation use permits are in force, of which over 10,000 are for utility rights-of-way. In 1984, 3,200 applications are expected, most of which will be energy related. Administration and processing of special-use applications for mineral activities will be funded under the minerals program in 1984. Over \$3.4 million was collected in land use fees in 1982.

A major and increasing workload has been the review of hydroelectric development project proposed for licensing by the Federal Energy Regulatory Commission (Federal Power Act, June 10, 1920). The proposals require extensive analysis and impact review and must be done in a timely manner.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Special Uses.....\$	7,190	5,576	-1,614
FTE	170	137	-33

A decrease of \$1,164,000 will provide for fee reviews (appraisals) on approximately 1,200 permits. Fees established in 1979 and earlier years will be continued on approximately 11,300 permits. Emphasis will be placed on energy related applications and most cost-effective fee reviews.

Funding will provide for administration of 32,000 permits. Reviews of compliance with Title VI of the Civil Rights Act of 1964 (PL 88-352) and Secretary of Agriculture regulations (7 CFR Part 251) issued pursuant to this Act will be conducted on 2,400 permits. The balance of permits will be those that require a minimal degree of administration. Cutbacks and deferrals of inspection will occur, however, any violations of conditions would result in little or no environmental impact on a short-term basis.

Administration and processing of special-use applications for mineral activities is being financed by the minerals program in 1984.

Object class information:

Salary	-902
Travel	-51
Transportation of things.....	-59
Supplies, materials and equipment	-164
Other contractual services	-438
Total	-1,614

Geometronics

Objective: To provide essential products to support the National Base Series Mapping Program.

Program description: The geometronics program produces base series maps to support resource management needs. Production is centralized at the Geometronics Service Center in Salt Lake City, Utah. All Regional field units provide support in the area of aerial photography, field edit and publication. The program also includes development work to increase efficiencies in the mapping process.

Increase for 1984:

	1984 Base	1984 Estimate	Increase
Geometronics\$	5,524	5,542	+18
FTE	134	135	+1

An increase of \$18,000 will enable the Forest Service to increase by 179 the number of maps produced. A total of 1,260 primary base series maps and 33 secondary base series maps will be produced. These maps are most critical to the management of the National Forest System. Those maps necessary for management of timber and minerals will be of highest priority.

Primarily Base Map - The master 1:24,000 scale, 7½ minute-quadrangle sheet which is used for the basis of all Forest Service maps.

Secondary Base Maps - Maps of a complete forest or unit, usually at a scale of ½ inch equal 1 mile. The maps are constructed from the Primary Base Maps and contain much of the same information.

Object class information:

Salaries	+18
----------------	-----

Land Line Location

	1982 <u>Actual</u>	1983 Appropriation Enacted to Date (Dollars	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) from Base
Land line location	\$ 25,011	24,610	25,353	27,593	+2,240
Miles.....	5,291	5,820	5,820	6,270	+ 450
FTE	545	504	504	549	+ 45

Objective: To identify and correctly mark property lines between National Forest System land and other property.

Program Description: The land line location program identifies the legal boundaries between National Forest System lands and other ownerships so that resource activities such as the timber sale program and recreation development can be carried out effectively. Boundaries must be identified to prevent trespass which is increasing by approximately 2,000 new cases annually. The recently passed Small Tracts Act P.L. 97-465 of January 12, 1983 should facilitate solutions to these problems.

The proper location of property lines by the Government is a prerequisite to construction and resource management activities adjacent to property owned by others. We have the responsibility to set an example of responsible land line identification and marking to assure that encroachment on private lands is avoided.

The Department of the Interior, Bureau of Land Management (BLM) has the leadership of the survey of public lands and performs some surveys of National Forest System lands as part of their overall responsibility. Funds are transferred from the Forest Service to BLM, currently averaging about \$1 million annually including 1984, to make additional surveys. The purpose of the funds and the respective agency responsibilities are set forth in a Cooperative Agreement between the Forest Service and BLM. Multi-year cadastral Survey projects are also planned under the agreement and updated annually.

Increase for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Increase</u>
Land Line Location	\$ 35,353	27,593	+2,240
FTE	504	549	+ 45

An increase of \$2,240,000 will provide for the survey of an additional 450 miles of property line between the United States and private landowners. This increase

will support timber sale and mineral management needs. This will permit resource management activities to occur up to the National Forest property lines without risk of trespass or without "set-backs" from the boundary leaving timber unharvested. Full utilization of National Forest System lands increases income from the timber sale, avoids damage claims and reduces administrative costs. These benefits are estimated to be worth \$15,000 per mile for 450 miles, or a total of \$6,750,000 return from the investment of \$2,240,000.

The planned accomplishments reflect productivity improvements implemented following a program analysis completed in 1982. Productivity improvement will result from involved project planning, implementation of new technology; and added emphasis on cost-sharing with adjoining landowners.

Object class information:

Salary	+1,252
Travel	+ 71
Transportation of things.....	+ 82
Supplies, materials and equipment	+ 230
Other contractual services	+ 605
Total	+2,240

Maintenance of Facilities

	1982 <u>Actual</u>	1983 Appropriation Enacted <u>to Date</u>	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
		(Dollars in thousands)			
Maintenance of facilities	\$ 11,833	13,638	13,993	13,982	-11
FTE	275	271	271	271	--

Objective: To provide for maintenance and minor improvement of facilities used for fire and general administrative purposes. These facilities support National Forest System activities. They include administrative sites, offices, service and storage buildings, and associated water, sanitation and electrical systems. This item also includes maintenance of airports, heliports, fire lookouts, and other fire management facilities.

Program description: The Forest Service uses approximately 11,200 permanent buildings with 12.8 million square feet, primarily at Ranger District and work center locations in managing NFS lands. Approximately 46 percent of these buildings were constructed prior to 1940, 37 percent between 1945 and 1965 and the remaining 7 percent since 1965. Most were constructed with a life expectancy of 30-35 years, consequently more than half are structurally and functionally beyond their useful lives. As buildings age, more expensive maintenance is needed. Minor maintenance will be funded from other benefitting funds or functions.

Decrease for 1984:

		1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
Maintenance of Facilities.....	\$	13,993	13,982	-11
FTE		271	271	—

A decrease of \$11,000 will continue the 1983 program. Abatement of unsafe and hazardous conditions for employees and public users of Forest Service facilities will be emphasized with special concentrations on public health deficiencies of seasonal crew support facilities.

Object class information:

Other contractual services	-11
Total	-11

Forest Fire Protection

		1982	1983	1984	1984	Inc. (+) or Dec. (-)
		<u>Actual</u>	Appropriation <u>Enacted to Date</u>	<u>Base</u>	<u>Estimate</u>	<u>from Base</u>
			(Dollars in thousands)			
Prevention	\$	25,927	24,073	24,977	25,452	+475
Detection	\$	7,528	7,977	8,277	9,607	+1,330
Attack	\$	62,844	69,230	71,830	78,792	+6,962
Aviation	\$	24,765	27,275	28,300	29,140	+840
Fuels	\$	21,171	21,508	22,315	11,747	-10,568
Total	\$	142,235	150,063	155,699	154,738	-961
	FTE	4,487	4,436	4,436	4,386	-50
Fuels Treatment (acres)		134,000	111,500	---	116,400	---

General: The Forest Fire Protection program provides protection for life, property, and all natural resources on the 191 million acres of National Forest System lands. In addition, protection is furnished to 20 million acres of adjacent State and private lands through fee or offset programs. The reduction of the flammability of wildland fuels and management of smoke, in compliance with regulations, are a part of the fire management program. The table below provides a national record of fires and acres burned on the National Forests from 1978 through 1982.

Statistical Comparison of the Number of Wildfires and Burned Area for Period 1978-1982

	<u>Number of Fires</u>		
<u>Calendar Year</u>	<u>Lightning Fires</u>	<u>Person Caused Fires</u>	<u>Total</u>
1978	5,536	6,632	12,168
1979	5,111	6,247	11,358
1980	4,623	6,615	11,238
1981	5,976	7,006	12,982
1982	3,795	3,489	7,284
Total	25,041	29,989	55,030
5-Yr Avg.	5,008	5,998	11,006

	<u>Acres Burned</u>		
<u>Calendar Year</u>	<u>NF Acres</u>	<u>Other Acres Protected</u>	<u>Total Acres</u>
1978	86,122	19,616	105,738
1979	327,712	43,094	370,806
1980	250,623	57,777	308,400
1981	164,425	45,206	209,631
1982	29,675	13,338	43,013
Total	858,557	179,031	1,037,588
5-Yr Avg.	171,711	35,806	207,517

The fire management program provides for fire protection and fuels management activities supporting resource management goals and objectives. This includes:

- A balanced fire management program that is cost-effective commensurate with the threat to life and property, public safety, resource values and management objectives.

- Use of prescribed fire as a management tool to protect valuable timber by reducing the volume of hazardous fuels on the forest floor, to prepare timber sites for planting, to increase water yields, to improve wildlife habitat and to increase the amount of available forage for red meat production.

- Collection and analysis of data on fire protection and fire use for formulation and evaluation of alternative land management plans and policies.

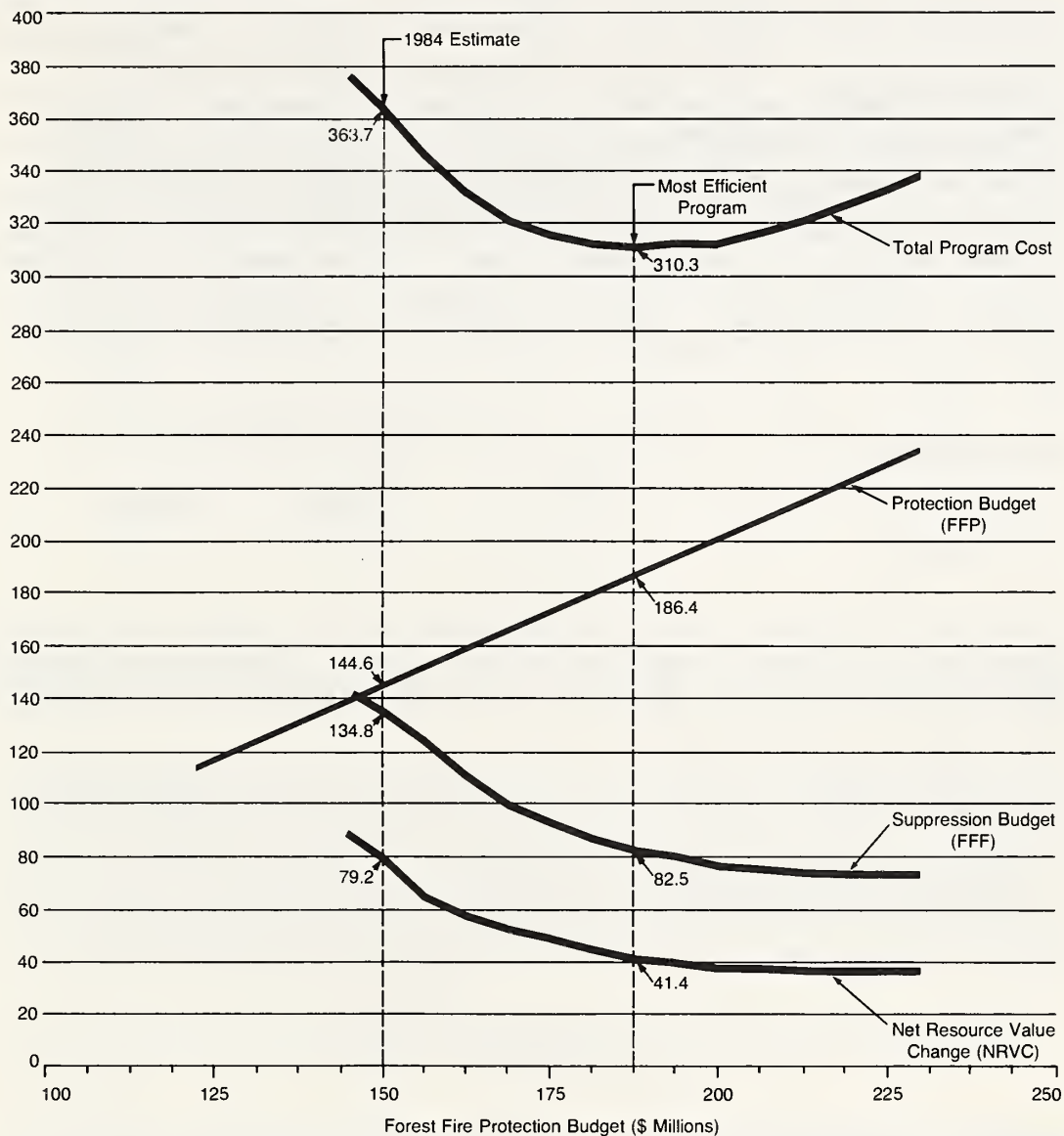
A national fire management analysis system is used to identify the most efficient protection program composition and level. The analysis is based on historical data and an economic efficiency criterion. It develops and considers statistically expected emergency fire suppression costs and expected net changes in resource values at alternative budgeted protection levels. The most efficient program is specified by the lowest sum of cost plus net resource value change.

The following graph illustrates the relationship among Forest Fire Protection (FFP), Fighting Forest Fires (FFF), and net resource value change (NRVC). The top curve is cost plus net value change, and its lowest point identifies the most efficient program budget level. The 1984 estimate was selected to hold down Federal costs within certain risk factors. Total program costs and resource losses will be less than at the most efficient budget level, if actual fire severity and occurrence is below the statistically expected norm. At the most efficient program level cash outlays would total \$268.9 million.

At the requested funding level, cash outlays are expected to be \$284.5 million. Outlays would be minimized at an FFP appropriation level of \$170.6 million at which point outlays would total \$267.7 million (FFP&FFF).

Relationship of FFP, FFF and NRVC

Fire Program Cost (FFP, FFF & NRVC) (\$ Millions)



Fire Prevention

Objective: To prevent person-caused wildfires when economically feasible.

Program Description: This includes actions taken to reduce the number and severity of person-caused wildfires. It involves: determination of the fire cause, fire prevention analysis, reduction of fire risk and hazards, public education, personal contacts, and determining need and implementing Forest closures and regulated use. Fire prevention specifications are developed and integrated with recreation special use administration, timber sale contracts and minerals activity permits. Inspections are conducted in these programs as needed to insure compliance and prevent resource loss. Fuels management is not included except for localized hazard reduction around recreational facilities, buildings, roadsides, or rights-of-way. Area fuel treatment is in the Fuels Management program. The fire management share of general forest planning costs is included here.

Increase for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Increase</u>
Fire Prevention.....\$	24,977	25,452	+475

An increase of \$475,000 will permit the Pacific Northwest, Southwest and Southern Regions, where 54% of the person caused wildfires occur, to increase their prevention program. Emphasis will be on prevention of high risk wildfires which statistically contribute to the greatest losses.

Object class information:

Salary	+465
Travel	+ 3
Other contractual services	+ 7
Total	+475

Fire Detection

Objective: To achieve prompt detection of wildfires facilitating effective and efficient fire suppression.

Program Description: The wildfire detection program consists of fixed and mobile detection using ground and aerial observers, electronic lightning detection and infrared scanning to detect and locate wildfires. Aircraft cost in support of the detection program is in the Fire Aviation program.

Increase for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Increase</u>
Fire Detection.....\$	8,277	9,607	+1,330

An increase of \$1,330,000 will be used to meet the increasing cost of aviation contracting and to provide for seven day coverage at key fixed lookout stations. Seven day coverage at fixed stations was curtailed as a cost reduction measure and this will reverse the trend. The greatest changes are planned for the Northern and Southern Regions.

Object class information:

Salary	+660
Travel	+10
Supplies, materials and equipment	+7
Other contractual services	+653
Total	+1,330

Fire Attack

Objective: To suppress wildfires in a cost-effective manner and minimize resource damage.

Program Description: This program provides the Forest Service with the capability to take prompt, effective suppression action on wildfires within the National Forest boundaries to meet land and resource management objectives. The Fire Attack Program also provides for the necessary organizing, training, and equipping of supplemental firefighters for both initial action and reinforcement. Supplemental firefighters are obtained from a variety of sources including non-fire financed Forest Service personnel, Forest Service volunteers, enrollees of human resource programs, industry, cooperating Federal, State, and local agencies of government and local individuals.

The Forest Service also renders fire suppression assistance to other Federal, State and local agencies of government through mutual aid and reimbursement agreements.

The following highlight three special interest components of the Fire Attack program:

1. Fire Trucks: The acquisition operation and maintenance of a fleet of fire trucks (engines) is funded both as a project expense and through a revolving working capital fund. Acquisition of additional equipment as authorized by appropriation is acquired from program funds. After acquisition, equipment is then capitalized into the Working Capital Fund and replacement of these vehicles or

equipment financed from working capital fund. Based on wildfire frequency, severity of wildland fires and the type of terrain where these occur, fire trucks vary from four-wheel-drive vehicles with 600 gallon permanently mounted tanks to "call-when-needed" pickup trucks with 50 gallon slip on tanks. Approximately 1,200 fire trucks, with a crew of 2 to 5 persons, are planned in 1984.

2. Interregional Fire Crews: Another major component of the Fire Attack program is 48 highly trained interregional, twenty-person crews, deployed as needed throughout the United States for wildland fire suppression. Historically these crews have proven to be effective and productive for initial and reinforcement suppression action. They provide a ready emergency resource for use by other Federal, State and local fire protection agencies. They are also used on planned fire management presuppression activities and other National Forest program priority tasks when not fighting fire.

3. FIREScope: The technologies developed in the southern California FIREScope Forestry Assistance program are now being implemented service-wide via the National Interagency Incident Management System (NIIMS) which includes our major cooperators (other Federal Agencies, States, Cities and Counties). This single, unified approach to management of major wildfires will significantly improve the effectiveness of our agency as well as the effectiveness of our major cooperators. In keeping with Congressional direction contained in the 1982 Conference Report, no separate budget request has since been made for this program.

Increase for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Increase</u>
Fire Attack.....\$	71,830	78,792	+6,962

An increase of \$6,962,000 will enable restoration of diminished initial attack capability. The increase will be used to return some engines to duty seven days per week instead of five and restore initial attack crew strength where it has been reduced to a level below optimum efficiency. This will reverse the trend of reducing crew availability and reducing crew size.

Object class information:

Salary	+6,809
Travel	+ 35
Supplies, materials and equipment	+ 36
Other contractual services	+ 82
Total	+6,962

Fire Aviation

Objective: To provide aviation management services and aircraft when needed to achieve Forest Service program objectives.

Program Description: This program provides aircraft, aircrews, support personnel, facilities and equipment for transportation of personnel and equipment reconnaissance, survey and aerial application of materials. It includes the support activities of training, inspection, operation and maintenance of base facilities and aircraft contract administration.

Aircraft, including both fixed-wing airplanes and helicopters, are utilized in accomplishing these varied missions. The following tabulation illustrates the missions and more significant uses: (FY 1981 data is used because FY 1982 data is not yet available.)

<u>Mission</u>	<u>No. Aircraft Used</u>	<u>Hours Flown</u>
Fire Detection/Recon	185	26,155
Fire retardant delivery	43	7,344
Other fire suppression	160	3,755
Transportation of personnel and equipment)	230	19,690
Subtotal	618	56,944
Support to non-fire activities	Unknown	36,179
Total	618*	93,123

* Does not include non-fire activity.

Approximately sixty percent of the total hours flown were in support of wildfire suppression. About 85% of the total hours flown were provided by commercial operators under contract or other agreement. The remaining hours flown were by aircraft owned or leased by the Forest Service or cooperating agencies. For example, all airtankers, all helicopters, all but two transport aircraft and one-half of the smokejumper aircraft are provided through contract.

Except for aviation management support, aviation costs related to non-fire activities are funded through those respective activities.

The cost of non-fire related aviation activities include such operations as aerial surveys for insect and disease control, timber sale reconnaissance, aerial photography and passenger transport. These costs are not identified or summarized as aviation costs but are recorded as hours flown as shown in the table above.

The Forest Service is currently conducting an Airtanker Needs Assessment which will be used for the next three year contract period from January 1984 through December 1986. This analysis will take into consideration economic efficiency, fire history, airtanker use, anticipated cooperator participation, alternative fire suppression force capabilities and the stability of the airtanker industry.

The actual number of airtankers to be contracted for during this fiscal year is not anticipated to change significantly from the 43 airtankers presently under contract. The emphasis will be to maintain a consistent, long term program ensuring National Forest lands adequate, reliable airtanker protection.

Increase for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Fire Aviation.....\$	28,300	29,140	+840

An increase of \$840,000 is planned to provide for increased airtanker availability costs anticipated when new contracts are awarded in early 1984. This will permit airtanker availability to be maintained at the 1983 level.

Object class information:

Salary	+822
Travel	+ 3
Supplies, materials and equipment	+ 5
Other contractual services	+ 10
 Total	 +840

Fuels Management

Objective: To reduce the volume of forest fuels, where cost-effective, to minimize the potential for large, destructive wildfires and to support land and resource management objectives.

Program description: This includes the inventory of living and dead and down fuel hazards, analysis of cost-effective alternatives for reducing or eliminating these hazards, actual treatment such as yarding and stockpiling for future biomass utilization and manipulation and/or fuel reduction via mechanical means or through use of prescribed fire. Benefits include, but are not limited to, increased utilization of woody material for fiber, home heat or fuel, clean air, additional recreational access and opportunity, increased grazing opportunities, improved wildlife habitat, temporary increase in quality water yields, and protection of timber resources while eliminating those hazardous fuels that feed high intensity wildfires during periods of extreme weather.

This program includes action to utilize smoke management concepts which result in smoke from prescribed fires being carried up and away from smoke sensitive areas.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Fuels Management.....\$	22,315	11,747	-10,568

A decrease of \$10,568,000 makes it possible to shift funding to higher priority fire program needs in prevention, detection, attack, and aviation. At the same time it has been possible to increase the fuel treatment program from 111,500 acres to 116,400 acres and to do it at a lower cost per acre.

Object class information:

Salary	-10,337
Travel	- 22
Transportation of things.....	- 33
Supplies, materials and equipment	- 55
Other contractual services	- 121
Total	-10,568

Fighting Forest Fires

	1982 <u>Actual</u>	1983 Appropriation Enacted to Date (Dollars in thousands)	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Fighting Forest Fires \$	69,004	1,000	1,000	1,000	—
FTE	(131)	(5)	(5)	(5)	—

General: This program provides an initial amount of funds for fighting of wildfires on, or threatening, National Forest System lands and the rehabilitation of burned over areas. These funds will only be used to the extent necessary under emergency conditions.

Under a proposed rule published in 36 CFR Part 211, provisions of the Reciprocal Fire Protection Act, 42 U.S.C. 1856b, will be implemented in emergency situations where there are no reciprocal agreements between the Forest Service and other fire protection agencies. Where Forest Service prescribed fires escape onto lands not administered by the Forest Service, the Forest Service may, on a non-reimbursable basis, commit resources to suppress these fires.

Also, upon written request, the Forest Service may commit personnel, materials, and equipment on a reimbursable basis on lands not administered by the Forest Service without regard to the fires threat to National Forest System lands or resources.

Program description: This program provides most of the direct expenses for fighting wildfires. Fighting Forest Fires (FFF) and Forest Fire Protection (FFP) are directly related. The cost of fire protection on National Forest System lands is the sum of forest fire protection, fighting forest fires and the net resource value changes as the result of wildfires. The relationship between FFP and FFF is displayed in the previous section of FFP. Costs due to actual suppression activities will require separate supplemental funding and/or reprogramming, as in the past.

No change for 1984.

Cooperative Law Enforcement

	1982 <u>Actual</u>	1983 Appropriation Enacted to Date	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) from Base
					(Dollars in thousands)
Cooperative Law					
Enforcement \$	3,734	5,145	5,190	(5,171)	-19
Number of Agreements	305	350	350	350	--
FTE	12	14	14	14	--

Objective: To cooperate in law enforcement with States and their subdivisions to remedy situations involving vandalism, destruction and theft of personal property, and assaults against visitors and users on National Forest System lands.

Program description: The cooperative law enforcement program provides reimbursement to State and local law enforcement agencies for extraordinary expenses associated with protecting the public and their property on the National Forests. In many cases, the number of visitors to the National Forest equals or greatly exceeds the resident population of the counties. Since this visitor use is seasonal and often occurs in geographically remote areas, extraordinary costs are associated with protecting the visiting public. While payments in lieu of taxes (PILT) are made to most of these counties, those that are most remote and least densely populated frequently do not receive sufficient PILT funds to carry out an effective law enforcement program on the Forest. Also, payments from the National Forest Fund (25 percent Fund) are made to most of these counties but are available only for roads and schools and not for law enforcement purposes. During 1981, 386 agreements were in effect. Approximately 750 eligible jurisdictions were eligible for assistance. A total of 305 agreement were in force in 1982. In 1983 and 1984, 350 agreements are being planned.

The 350 agreements and funding level will also respond to those areas where cultivation of marijuana represents a substantial risk to visitors to the National Forests.

Decrease for 1984

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
Cooperative Law			
Enforcement \$	5,190	(5,171)	-19
FTE	14	14	--

The decrease of \$19,000 will be absorbed through adjustments in the agreements with some local law enforcement agencies.

The 1984 estimate is planned to be financed with funds available from the 1983 deferral of \$108,035,000.

Object class information:

Other contractual services	-19
Total	-19

Forest Road Maintenance

	<u>1982</u> <u>Actual</u>	1983 Appropriation Enacted <u>to Date</u> (Dollars in thousands)	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Forest Road					
Maintenance	\$ 65,286	59,535	61,246	(64,164)	+2,918
Miles	304,726	310,000	310,000	319,000	+9,000
FTE	1,203	1,143	1,143	1,197	+54

Objective: The objectives of the road operations program are to: perpetuate the road to serve its intended management purposes; protect the investment, environment, and adjacent resources; provide for user safety; meet applicable air- and water-quality standards; and provide for user economy, access, and convenience. This work is in response to and in support of:

1. The National Forest Roads and Trails Systems Act of October 13, 1964, which states that the maintenance of an adequate system of roads is essential to meet the increasing demands for timber, recreation, and other uses. Adequate road maintenance has the effect of increasing the value of timber and other resources and is essential to enable the Secretary of Agriculture to provide for intensive use, protection, development, and management under principles of multiple use and sustained yield of products and services."

2. The Highway Safety Act of 1966 which sets forth criteria for the development of a safety program to reduce death and injuries on the roads of this Nation.

3. The National Forest Management Act of 1976 which contains requirements on how National Forest lands are managed.

4. Resource program objectives (outputs) identified in the Annual National Forest Program of Work.

Program Description: Road operations are defined as the management of traffic and maintenance on forest roads. Traffic management is the continuous process of analyzing, controlling, and regulating road use. Maintenance management is the continuous process of planning, organizing, directing, performing, controlling, and evaluating road maintenance activities.

The forest development road system exceeds 310,000 miles of various standards and types of roads. Approximately 90 percent of this mileage is single lane and 75 percent of this mileage is unsurfaced (no gravel or pavement). The capital investment in this system, over a period of 60 years, exceeds \$2.8 billion. The replacement cost of this road system in today's dollars is estimated to exceed \$10 billion.

Specific work activities funded by the Road Maintenance program include:

1. Traffic Management.

- a. Traffic studies - collecting and analyzing statistically sound data on the use and physical characteristics of the road system.

- b. Jurisdiction - determining and resolving road jurisdiction and responsibility with States, counties, other Federal agencies, and private landowners.

- c. Cost Share Program - managing right-of-way, construction, and use agreements for those situations where private landowners and the Forest Service agree that joint development of a single road system is both feasible and desirable.

- d. Regulating and controlling road use - determining the need for developing and implementing traffic rules, (vehicle size, use restriction, road closures, permits, cooperative agreements, commercial use).

- e. Enforcement - cooperation with local authorities and enforcement of Federal laws, rules, and regulations on the forest development road system. This includes road closures, load limits, etc.

- f. Traffic Control Devices- planning, purchasing, and installing replacement traffic control devices used to direct and assist in the guidance and the control of traffic. Traffic control devices are required on any facility open to public travel. Traffic control devices include regulatory signs, warning signs, guide signs, pavement marking, and signing for road construction and maintenance activities.

2. Maintenance Management.

- a. Maintenance planning - inspecting roads and bridges to determine maintenance needs and developing a plan to finance and accomplish work.

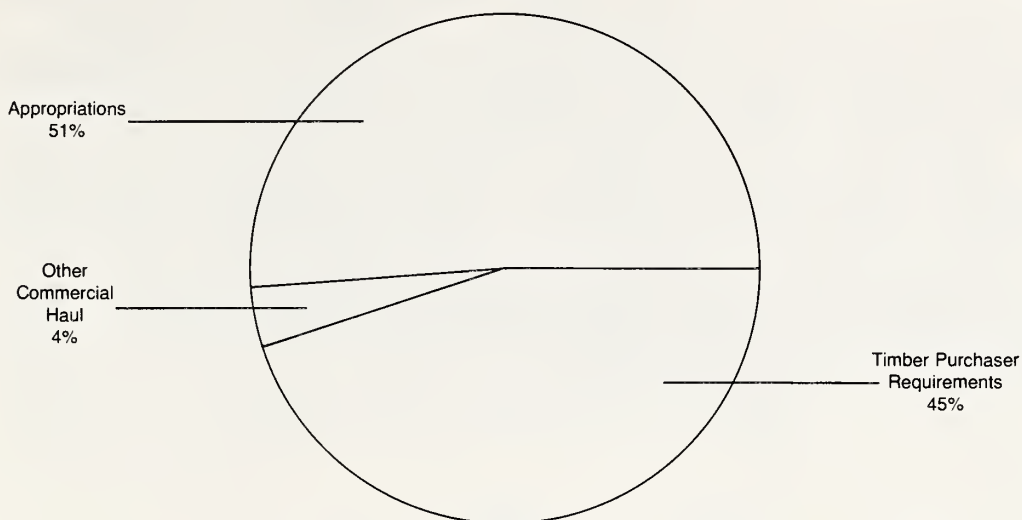
- b. Maintenance work - performing on-the-ground maintenance work activities such as roadside brushing, surface grading, culvert cleaning, replacing worn out surfacing, repairing bridges and other structures, replacing damaged signs, etc.

The full Road Operation Program is financed by (1) Federal appropriations, (2) requirements on purchasers of Government timber, and (3) requirements on other commercial users (mining, private timber haul, etc.). The approximate breakdown of these funding sources is shown in Figure 1.

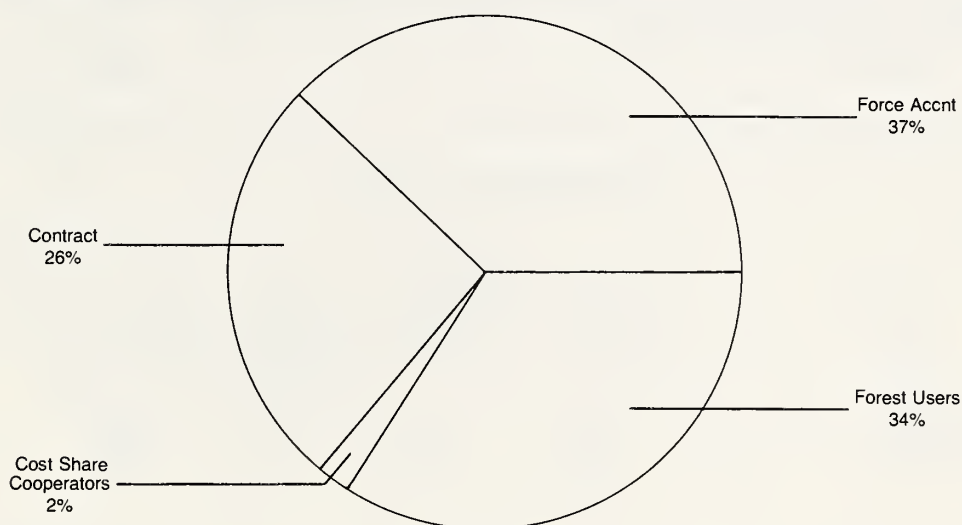
Funding available from timber purchasers and other commercial users is limited to that necessary to maintain roads in a satisfactory condition commensurate with its particular use requirements. Maintenance is shared by each user in proportion to their use. However, a significant portion of the road maintenance job does not result from road use. This work, consisting of such items as culvert cleaning, roadside brush control, maintenance of traffic control devices, bridge painting, etc., must be performed regardless of use. During periods of commercial haul, these "fixed costs" are shared between the Forest Service and the commercial hauler. During periods of reduced timber harvest, such as have occurred during recent years, Forest Service obligations from these "fixed costs" increases.

Actual on-the-ground performance is accomplished by Forest Service crews, by formal maintenance contracts, by cost-share cooperators, and by forest users (timber purchasers, oil-gas permittees, etc.). The approximate distribution of work is shown in Figure 2.

Funding Sources By Percent of Total Financed Program



Work Performance By Percent Based Upon Value of Work Accomplished



Selective road closures, much tighter management of the road system and deferring maintenance work until such time as it can be accomplished as part of the road reconstruction program have been implemented to reduce Federal costs. Some increased maintenance is required as a tradeoff of construction of roads to lower standards than in the past.

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Increase</u>
Road Maintenance.....\$	61,246	(64,164)	+2,918
FTE	1,143	1,197	+54

The 1984 estimate is planned to be financed with funds available from the 1983 deferral of \$108,035,000.

Salary	+1,128
Travel	+ 56
Transportation of things.....	+ 276
Supplies, materials and equipment	+ 362
Land and structures.....	+ 133
Other contractual services	+ 963
 Total	 +2,918

		1983			Inc. (+)
		Appropriation			or
	1982	Enacted	1984	1984	Dec. (-)
	<u>Actual</u>	<u>to Date</u>	<u>Base</u>	<u>Estimate</u>	<u>from Base</u>
		(Dollars	in thousands)		
Forest Trail					
Maintenance	\$ 11,312	9,785	10,100	(8,162)	-1,938
Miles (thousands).....	96.3	66.0	--	54.0	--
FTE	360	296	296	239	-57

Program description: The National Forest trail system contains more than 98,500 miles of trails providing essential public access to the Forests for hiking, vehicle and horseback riding, nature appreciation, and for resource management, fire control and law enforcement. National Forest trails are key to accomplish the Forest Service objective to increase the supply of cost-efficient recreational opportunities. Trails offer public access with a minimal investment and thereby provide great use and enjoyment of National Forest System lands. Since 1970, trail use has more than doubled. In 1982, there were 13.2 million recreation visitor-days (RVD's) spent on National Forest System trails. A family of four on a three-hour hike is one recreation visitor day as is one person fishing for 12 hours.

Trail maintenance includes repairing trail signs and trail bridges as well as working on the trail paths themselves.

Maintenance provides for use of the trail, protect prior investments in trail construction and to minimize soil erosion and sedimentation. Sediment is damaging to fish habitat and municle water sources. Level of trail maintenance range from custodial (level 1) to high standard (level 5). Custodial maintenance minimizes resource damage from erosion but does not protect the investment. Increased trail maintenance through level 5 provides for increased use, safety, and facility protection.

Trail maintenance is a popular program with volunteers. It provides an opportunity to work together in the out-of-doors to acheive an identifiable common goal. In 1982, conservation-minded individuals and groups contributed 820 person-years of labor to the recreation program on the National Forests. We estimate volunteers provided 110 person-years and performed 10,000 miles of trail maintenance under the supervision of Forest Service officers.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Trail Maintenance.....\$	10,100	(8,162)	-1,938
FTE	296	239	-57

Proposed funding will maintain 54,400 of the highest priority miles. Volunteers are expected to accomplish an additional 10,000 miles of trail maintenance. The remaining 34,100 miles of the 98,500 mile system will receive custodial (level I) maintenance.

The 1984 estimate is planned to be financed with funds available from the 1983 deferral of \$108,035,000.

Object class information:

Salaries and benefits	-1,049
Travel	- 96
Transportation of things	-181
Supplies, and equipment	-284
Other contractual services	- 328
Total	-1,938

Timber Sales Administration and Management

		1982	1983	1984	1984	Inc. (+) or Dec. (-) from Base
		<u>Actual</u>	Appropriation enacted <u>to Date</u>	<u>Base</u>	<u>Estimate</u>	
			(Dollars	in thousands)		
Timber resource						
inventory						
planning	\$	9,026	10,320	11,458	10,146	-1,312
(thousand acres) ..		1,313	1,280	1,280	1,280	—
	FTE	318	345	345	335	-10
Silvicultural						
examination						
administration	\$	20,515	23,622	23,288	21,635	-1,653
(thousand acres) ..		7,316	5,771	5,571	5,560	-11
	FTE	720	789	789	740	-49
Sales preparation						
and harvest						
administration	\$	130,295	124,320	130,605	161,108	+30,503
(BBF offered)		11.0	11.0	11.0	11.6	+.6
	FTE	4,576	4,153	4,153	4,618	+465
Total	\$	159,836	158,262	165,351	192,889	+27,538
	FTE	5,614	5,287	5,287	5,693	+406

General: A significant portion of the Nation's timber resources are on the National Forests. These lands contain 50 percent of the country's inventory of softwood sawtimber. The demand for forest products increased by 70 percent in the past 30 years, and the current prediction is that this demand for lumber, plywood, and other timber products will double in the next 50 years. Forest plans and related resource management programs must anticipate higher output from the National Forest System to keep pace with this demand.

Future production increases can not occur on short notice. They must be "planned into the pipeline" so that an orderly process can be observed to complete required planning steps and proper coordination with other resources.

Timber Sales Planning and Preparation Process. The timber sale preparation process follows the direction established in the Forest Land Management Plan. It begins with the identification of a project area and ends with the award of a timber sale contract. A 5-year timber sale action plan is maintained as a scheduling device for the sale preparation process.

The sale preparation process:

Position Statement Development - completed at least 5 years before sale offering.

This process follows the direction established in current multiple-use plans or the Forest Land Management Plan.

It includes extensive reconnaissance and data gathering by staff specialists to develop recommendations on the feasibility of preparing a timber sale proposal. It also serves as the beginning of the National Environmental Policy Act (NEPA) process. This position statement is a prerequisite for entering the proposed timber sale project in the the 5-year timber sale action plan, and it serves as a decision document for making further project investments. A proper review conducted at this point should eliminate uneconomic or environmentally unsound project proposals before significant investments are made.

Sale Area Design - prepared 1-3 years before sale offering.

The sale area design process is an intensive field investigation within and adjacent to the proposed project area. Information obtained by staff specialists provides the basis for the analysis, evaluation, and preparation of alternatives under the NEPA process. The NEPA process is completed when an Environmental Assessment (EA) is approved. Sale area planning follows management direction in the Forest Management Plan and/or Multiple-Use Plan. The planning and design considers the development of an entire drainage, adjacent area, transportation analysis area, or other logical planning unit, even though a proposed timber sale may affect only a portion of the area. Consideration is given to the pattern, methods, and timing of treatments for the entire area to ensure that future treatments will effectively meet management objectives. Detailed information is developed which describes the nature of conditions of timber stands proposed for harvest, silvicultural prescriptions, logging systems applications, the location of key local roads, and planned fuel treatments.

Sale Plan Implementation - completed 3 months to 1 year before sale offering.

This activity provides for the implementation of the sale plan in accordance with the Environmental Assessment. This includes timber marking, timber volume and quality determination, on-the-ground location of harvest units, logging systems, and survey and design of roads. Property lines are located and the necessary cost-sharing agreements and right-of-way easements are obtained.

Final Sale package Preparation, Review, Appraisal, and Offering - completed 2-3 months before sale offering.

The contract, timber appraisal, advertisement, bid form, prospectus, and sale area map are assembled as a complete package. This activity is concluded with the offering of the completed package through advertisement.

Bid Opening

This includes accepting the bids, conducting an auction when appropriate, and determining the successful bidder.

Sale Award

After the apparently successful bidder has been identified, bidder qualifications, must be determined, EEO clearance must be obtained, a road option investigation and feasibility must be completed, if applicable, and finally, the sale is awarded.

FY 1984 Timber Sales Program and Timber Support

<u>Title</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
	(Dollars in thousands)		
National Forest System:			
Timber Management	114,400	118,500	135,281
Harvest Administration	44,100	36,600	51,600
Timber Support:			
Minerals	1,200	1,200	1,020
Land line location	18,400	17,800	22,430
Forest fire protection	2,700	2,600	3,970
Road maintenance	35,900	30,800	(33,400) ^{1/}
Recreation	8,300	8,100	8,020
Wildlife and fish	4,500	4,100	8,600
Range	500	400	920
Soil and water	5,500	5,600	8,670
Subtotal, Timber Support	77,000	70,600	53,630
Total, National Forest System	235,500	225,700	240,511
Road Construction:			
Forest Service construction	212,800	208,566	210,620
Purchaser construction	(242,542)	(240,000)	(291,300)
Purchaser roads constructed by Forest Service	40,200	44,900	50,475
Total, Road Construction	253,000	253,466	261,095
Special Accounts:			
Brush Disposal	29,588	50,700	48,300
Timber Salvage Fund	6,822	7,900	12,775
Tongass Timber Supply Fund	42,000	41,500	41,500
Total, Special Accounts	78,410	100,100	102,575
TOTAL, TIMBER SALES PROGRAM	566,910	579,266	604,181

^{1/} To be financed with funds available from the 1983 deferral of \$108,035,000.

	<u>Outputs</u>		
Timber prepared (BBF)	11,400	11,000	11,600
Timber offered (BBF)	11,100	11,000	11,600
Timber harvested (BBF)	6,747	8,500	10,500

Timber Resource Inventory Program

General: The timber resource program provides information for the orderly management of the timber resources on the National Forests. The information is primarily used to determine lands suitable for timber productions, timber sales schedules, and opportunities for maintaining or increasing yields through intensive forest management in the course of developing land and resource management plans.

Objective: To gather and provide timely information on the extent and condition of the timber resource on National Forest System lands, as required to meet the direction contained in the National Forest Management Act of 1976.

Program description: Timber resource inventories provide the information necessary to compile land classification, timber volume determination, growth rates, and other information required for the periodic development and updating of land and resource management plans. These inventories describe the state of the timber resource on each National Forest. This provides a basis to evaluate changes during the planning period. Additionally, they provide resource information for research publications and National RPA assessments. Approximately 1.3 million acres of National Forest System lands are inventoried annually under this program, in order to have a systematic schedule to meet the requirements for a 10-year review cycle for National Forest land and resource management plans.

Decrease for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Decrease</u>
Timber resource inventory			
program \$	11,458	10,146	-1,312
FTE	345	335	-10

The 1984 proposal of \$10,146,000, a decrease of \$1,312,000 will provide for the collection of timber inventory data on 1,280,000 acres of National Forest lands necessary to keep on schedule for the preparation and update of individual National Forest System land and resource management plans. This is the same number of acres to be inventoried in 1983. The unit cost decrease from \$8.06 per acre in 1983 to \$7.93 per acre in 1984 (2 percent) is due to increases in productivity.

Object class information:

Salary and benefits	-300
Transportation of things	-20
Supplies, materials and equipment	-85
Other contractual services	-907
Total	-1,312

Silvicultural Examination

Objective: To provide a periodic review and analysis of the condition and treatment needs for timber stands to meet forest and resource management plan objectives. This activity also provides information needed to monitor and certify silvicultural treatments to ensure that the timber resource is managed properly and responsibly.

Program description: This activity includes the gathering of timber stand data, compiling and storing the data in stand files, and preparing an analysis and written prescription for approximately 5 million acres of forest land to ensure proper treatment. Timber stands are normally scheduled for examination at 10-year intervals to allow land managers to keep track of changing stand conditions and treatment needs. Timing of the examinations is of the utmost importance. Examinations need to be accomplished 4-5 years before the proposed treatment, such as a timber sale, to allow for the orderly development of treatment prescriptions and use of the information in the National Environmental Policy Act (NEPA) process. Although most stand examinations are conducted by Forest Service employees, there has been an increase in recent years in the number of acres accomplished through contracting.

A stand prescription is a written document prepared by a certified silviculturist that describes the current stand conditions and the silvicultural treatments proposed for a timber stand. The prescription is based upon the data from the silvicultural examination. The prescription includes a description of the physical site factors, management direction, and the treatments that will meet the objectives for the area. Prescriptions for timber cutting, reforestation, and stand improvement describe the sequence of events, timing, and techniques of the treatments to be used. The prescription also describes the desired stand after treatment in terms of tree density and distribution and species composition following treatment, and growth objectives so as to serve as a basis for treatment monitoring and evaluations.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Silvicultural Examination	\$ 23,288	21,635	-1,653
FTE	789	740	-49

This planned fiscal year 1984 program of \$21,635,000, a decrease of \$1,653,000 from the base will provide for the stand examination work necessary to support the 11.6 billion board foot timber sales preparation program in 1984 and beyond. Data collection and prescription preparation for other stand improvement work will be done for the reforestation and stand improvement program. The average cost of stand examination work is estimated to decrease by 5 percent (\$4.09 per acre in 1983 to \$3.89 per acre in 1984) due to increases in productivity.

Object class information:

Salary and benefits	-1,185
Transportation of things	-95
Supplies, materials and equipment	-158
Other contractual services	-215
Total	-1,653

Sale Preparation and Harvest Administration

Objective: To carry out a timber sale program that:

1. Compiles with applicable laws, regulations, and forest land management plans.
2. Is responsive to both the short- and long-term economic factors guiding the restoration of a healthy forest products industry that can provide the Nation with a stable supply of wood products at marketable prices.
3. Incorporates cost-efficiency as a basis decision tool while providing for the necessary protection of National Forest resource values over the long term.
4. Is aggressive in optimizing the utilization of the available wood supply through advanced technology and marketing opportunity.
5. Incorporates improved practices and procedures aimed at protection of the overall public interest.

Program description: Timber sale preparation and harvest administration is a multi-faceted program. Each facet is described under separate headings which include: timber sale preparation and harvest administration, heli-stat, substitute earth anchor systems, wood residue and fuelwood.

Timber Sale Preparation and Harvest Administration

Timber sale preparation program activities have been detailed in the general remarks above. The 1984 preparation program will involve work on sales to be offered in 1984, but most of the work will affect sales to be offered in 1985 through 1990. Work will peak on 1986 offerings which are projected to be 13.1 BBF based on the outlook for recovery in housing starts to the 2 million level.

	<u>Sales Prepared</u>	<u>Sales Offered (bbf)</u>	<u>Volume Harvested (bbf)</u>	<u>Housing Starts (in millions)</u>	
1976	10.3	10.3	9.6	1.5	(Dept. of Com.
1977	11.6	11.0	10.5	2.0	"
1978	12.2	12.6	10.1	2.0	"
1979	12.4	12.4	10.4	1.8	"
1980	12.4	12.4	9.1	1.3	"
1981	12.2	12.2	8.0	1.1	"
1982	11.4	11.5	6.7	1.1	(Estimated)
1983 planned	11.0	11.0	8.5	1.2	"
1984 planned	11.6	11.6	10.5	1.6	"
1985 estimated	12.3	12.3	11.7	1.9	"
1986 estimated	13.1	13.1	11.7	1.9	"
1987 estimated		11.9	11.9	2.0	"
1988 estimated		11.9	11.9	2.0	"

Sales in the late 1970's went for high prices due to the anticipated housing construction (in early 1980's) that did not materialize. Consequently, some sales

will not be completed and the Forest Service estimates that 800 million board feet will need to be resold.

Special programs which will be developed or implemented in 1984:

- National direction for a tree measurement sale program.
- A sales tracking and reporting system (STARS) which will readily provide basic data on the sales program.
- National direction on transaction evidence appraisal systems.
- A revised national timber sale contract.
- Procedures to prevent adverse effects of skewed bidding.
- New policy and procedures for permitting stumpage scaling by third-party scaling organizations (legislation proposed in FY 1983).
- Re-emphasis on mill studies to provide basic data need for appraisals.

Support from other budget line items is an integral part of the timber sale program. Inventory analysis and impact assessment of other National Forest resources is necessary to meet the requirements of the National Environmental Policy Act (NEPA) and the National Forest Management Act (NFMA). Sale preparation and administration require engineering services for transportation planning, survey, design, contract preparation, construction inspection, and road maintenance. The sale program requires strong support in cadastral surveys where sales are planned adjacent to other ownerships. Right-of-way acquisition is another ongoing support program to timber sales.

A portion of the sale program is proposed to be funded from other sources as follows:

- O&C Grant Lands (BLM) - A sales program of 36 million board feet will be carried out at a cost of \$2,655,000
- Timber Salvage Sale Fund (permanent appropriation)-522 million board feet, \$12,775,000

Heli-Stat

The Heli-Stat project is designed to test the concept of a hybrid heavy-lift airship for use in timber harvesting. The project involves the fabrication of an airship using surplus Navy equipment and testing the vehicle in a variety of timber harvest operations. If the concept is feasible, it would have the potential of contributing significantly to the Nation's supply of available timber.

During 1984, \$5.7 million dollars is budgeted for Heli-Stat. Of this, \$2.0 million is for logging qualification trails to be conducted at Lakehurst, Pennsylvania; \$2.0 million is for completion of crew training; \$.7 million is budgeted to log a site in the nearby Allegheny National Forest prior to ferrying the vehicle to the West Coast. Assuming successful operation on the Allegheny, \$.5 million is budgeted for the ferry and \$.5 million for the main base operations on the West Coast.

Substitute Earth Anchor System (SEAS)

As timber harvest moves into more difficult terrain, harvesting necessitates more reliance on cable logging systems. Such systems require adequate anchors for support. Natural anchors, such as deep-rooted stumps, do not exist on an estimated 10 percent of planned harvest areas.

Shallow-rooted trees on the upper slopes in southeast Alaska pose a special problem. Because of the urgent need to develop substitute anchor technology, the Forest Service accelerated a project to develop it. The 4-year cost is expected to total \$4.4 million. On September 30, 1982, a 3-year contract totaling \$2.8 million was awarded to perform work required to develop substitute anchors for cable systems. Funding obligations used \$1.3 million from 1982 with the remainder to come from subsequent fiscal years. \$1.7 million from 1983 funds was used to administer the program and to fund a portion of the contract. In 1984, the Forest Service will expend \$900,000 to complete the contract and initiate field testing.

Wood Residue

This special wood residue utilization program is a 5-year pilot program (FY 1982-86). Its purpose is to demonstrate the efficient utilization of wood residue in residential, commercial, industrial, and powerplant application. Making information available on the pilot project and demonstration results is an important part of the program. "Residue removal credits" are earned by National Forest timber sale purchasers for their removal of residues on pilot projects involving some timber sales. Residues will be sold by the Forest Service or they may be marketed by the timber sale purchaser.

The 1984 request consists of projects in California, Oregon, Washington, Montana, and Idaho as well as nationwide emphasis on program potential for nonfederal lands. Planned markets for the project residues are primarily residential and powerplant applications. The 1984 funding level is \$1.4 million. This total includes projects in Region 1 (Montana, Idaho, North Dakota and South Dakota) and Region 6 (Oregon and Washington).

Fuelwood

Fiscal year 1982 showed another substantial increase in the amount of the fuelwood removed from National Forest System land. Over 860,000 individual permittees harvested and used an equivalent of 2.3 billion board feet (bbf) of fuelwood. This represents an 11 percent increase over 1981. We expect an increase to 2.5 bbf in this extremely popular program for 1983 as well. The cost of administering a 2.7 bbf program in 1984 is \$5,600,000 and is included in the budget estimates.

In 1981 a comprehensive study was made of the fuelwood program. As a result of the study, new national direction will be implemented in 1983 to charge for most of the firewood previously provided free. Free use will be continued where there is a demonstrated need and where there are excess supplies. Revenues from the fuelwood program will amount to approximately \$5 million in 1983 and \$10 million in 1984.

Fuelwood harvest provides protection and silvicultural improvement to the National Forests. Residues from commercial timber harvesting operations are often utilized by fuelwood cutters. Such cutting reduces the buildup of fuel on the forest floor and reduces the cost to the Forest Service of final disposal of this fire hazard. The cutting and removal of fallen or standing dead trees in stands killed by insects also reduces fire hazards.

Young stands with an overstocked supply of trees are improved through thinning cuts. Under the supervision and/or designation of a Forest Officer, the Forest Service has accomplished timber stand improvement at substantially reduced costs through wood cutters contributed labor.

The program accomplishments in the fuelwood harvest for personal use is shown in the following table. This volume is in addition to the volume reported as harvested in previous tables.

<u>Fiscal Year</u>	<u>Harvest Volume</u> <u>(billion board feet)</u>		
1979	1.6		
1980	2.0		
1981	2.1		
1982	2.3		
1983	2.5		
1984	2.7		

<u>Increase for 1984:</u>	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Increase</u>
Sale preparation			
and harvest			
administration	\$		
	130,605	161,108	+30,503
FTE	4,153	4,618	+465

The increase of \$30,503,000 is composed of \$14,878,000 for timber sale preparation and offering and \$15,625,000 for harvest administration. The increase for sale preparation will enable the offering of 10.8 bbf in new sales, re-offering 0.8 bbf of defaulted sales, and advance work to boost shelf volume to 1.5 bbf in preparation for increased program levels in 1985 and 1986. The increase over 1983 is offset partially by a reduced level of funding for O&C Grant Lands timber sales. The O&C program for 1983 was funded for 200 million board feet whereas the 1984 program is planned at 36 million board feet. Since the O&C program is part of the total timber sale program, the 164 million board feet difference will be offset with National Forest System funded sales in non-O&C areas. The 1984 level will support an output of 522 million board feet from salvage sales.

Support financing increases will give needed impetus to preparation of additional shelf volume. Particular emphasis for funding increases in soil and water, wildlife and fisheries will enable needed inventories and analysis for environmental issues that have been the point of numerous administrative appeals. Other significant increases in fire and range will provide a level of support to meet the important issues of forest residue treatment and transitory range opportunities.

Harvest administration is increased by \$15,625,000 over the base. This will finance a projected 10.5 bbf harvest volume in response to predicted improvement in market conditions. Additional increase is responsive to the increased complexity of administering contract defaults and implementing contract relief measures (extensions and related payment procedures), a workload which is inversely related to harvest level.

The 1984 funding level for sale preparation and harvest administration recognizes the "pipeline" nature of the timber sale program. While sale offerings in 1984 will be 11.6 billion board feet, funding is provided to maintain the out-year sale planning level to be responsive to predicted wood supply needs for the future.

Object class information:

Salary and benefits	+12,151
Travel	+2,324
Transportation of things	+6,434
Supplies, materials and equipment	+6,254
Other contractual services	+3,340
 Total	 +30,503

Reforestation and Stand Improvement

	1982 Actual	1983 Appropriation enacted to Date	1984 Base	1984 Estimate	Inc. (+) or Dec. (-) from Base
Reforestation-NFS/RTF ..\$	58,510	61,843	63,500	(49,050)	-14,450
(thousand acres)....	222	191	191	134	-57
FTE	1,465	1,475	1,475	900	-575
Reforestation-KV\$	(62,890)	(81,000)	(82,780)	(84,350)	(+1,570)
(thousand acres)...	161	214	214	215	+1
FTE	(1,290)	(1,435)	(1,435)	(1,435)	(--)
Total Reforestation (thousand acres)...	383	405	405	349	-56
Stand Improvement-					
NFS/RTF.....\$	22,635	31,048	31,880	(28,274)	-3,606
(thousand acres) ..	240	241	241	188	-53
FTE	572	740	740	516	-224
Stand Improvement-KV ..\$	(14,900)	(24,900)	(25,450)	(26,850)	(+1,400)
(thousand acres) ..	121	142	142	142	-
FTE	(305)	(1,435)	(435)	(435)	(--)
Total Stand Improvement (thousand acres) ..\$	361	383	383	330	-53
Nurseries NFS/RTF\$	14,466	15,144	15,550	(15,110)	-440
Nursery stock-NFS .	146	136	155	133	-22
Nursery stock-other	11	11	11	11	-
(million seedlings)					
FTE	360	360	360	347	-13
TOTAL - NFS/RTF.....\$	95,611	108,035	110,930	(92,434)	-18,496
FTE	2,397	2,575	2,575	1,763	-812
GRAND TOTAL\$	173,401	213,935	219,160	203,634	-15,526

1/ Funding and acres of reforestation and stand improvement under the Knutson-Vandenberg (KV) and the Reforestation Trust Fund (RTF) are shown here for display of the major elements of the program. See the Trust Fund and Reforestation Trust Fund sections for additional information.

General: Reforestation and stand improvement activities are directed toward obtaining adequate stocking of forest lands and a level of timber productivity for sustained-yield management of National Forest System lands. The objective is to increase growth rate and product quality of timber growing on the National Forests to the levels consistent with maintenance of environmental quality, multiple resource use objectives, and total social and economic benefits and costs. The reforestation and stand improvement program is financed with both deferred appropriated funds, Reforestation Trust Funds, and trust funds deposited by timber purchasers for sale area improvement activities under provisions of the Knutson-Vandenberg Act.

Source of Reforestation and Stand Improvement Funding

<u>Account</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
National Forest System:			
1982 Funds	95,611	--	--
1983 Funds	--	--	30,538
1984	--	--	--
Reforestation Trust Fund	--	108,035	61,896
Knutson-Vandenberg	77,790	105,900	111,200
Total	173,401	213,935	203,634

Reforestation

Objective: To annually reforest an area equal to the area deforested in the preceding period while eliminating the feasible backlog by 1985.

Program description: As of October 1, 1982, an estimated 1,070,000 acres of National Forest System lands needed to be reforested. These needs result from the harvesting of timber; nature disasters such as fire, storms, insects, and disease; and previous seeding, planting or natural regeneration failures. Such needs accrue continually over the years. The Forest Service meets those needs through seeding, planting, and preparing sites to encourage natural regeneration when that is the management prescription. Some areas regenerate naturally without requiring cultural or other special treatment and investments. Each year the estimate of needed reforestation changes as accomplishments are reported, new inventories are completed, and new additions occur as a result of timber harvests and other factors.

Part of the needed reforestation stems from a "backlog" of such work that existed for many years. For example, on October 1, 1982, this totaled an estimated 272,000 acres. About 129,000 acres of this backlog cannot be programmed for reforestation due to lack of access, incomplete land management planning (RARE II further planning areas is one illustration), constraints on herbicide use, economic, or other factors. It is possible that some of the 129,000 acres may never need to be programmed because of natural regeneration during the waiting period, and management planning decisions that may remove these acres from commercial forest land, management considerations, or other factors. The backlog balance of 143,000 acres is projected to be accomplished by 1985.

The following table shows the existing reforestation needs to be accomplished through October 1, 1985:

	<u>Backlog</u>	<u>Current or Anticipated</u> (thousands of acres)	<u>Total</u>
Balance:			
October 1, 1982	272	798	1,070
Additions:			
October 1, 1982 -October 1, 1985	--	1,250	1,250
Accomplishments:			
October 1, 1982 -October 1, 1985	143	1,009	1,152
Balance:			
October 1, 1985	129	1,039	1,168

When the existing carryover of "backlog" work is completed, current reforestation needs are expected to level off at about one million acres. There is usually a 2 to-3 year lag between the time that an area is deforested and the time that reforestation can be accomplished. This indicates a continuing reforestation program of about 400,000 acres per year, including K-V work.

Reforestation represents a capital investment opportunity and cost-effectiveness is a primary concern in planning and scheduling the work. Improvements in benefit-cost analysis, site productivity measurement, regeneration techniques, and related work guide the program. Certification of lands reforested is done following periodic on-the-ground examination to verify the success of the treatment used to establish trees on the area.

Decrease for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Decrease</u>
Reforestation \$	63,500	(49,050)	-14,450
FTE	1,475	900	-575

The proposed \$49,050,000 program for FY 1984, a decrease of \$14,450,000, will provide the funding necessary for the complete reforestation of 134,000 acres.

This decrease of 57,000 acres from 1983 is sufficient to maintain current needs levels because of the reduced harvest levels in 1982. Reforestation of about 70,000 acres of backlog acreage will also be accomplished and keep the program on track to eliminate the backlog acreage by 1985.

Because of more difficult planting sites, the lack of good access, a reduction in human resources programs (YCC & YACC), and increases in animal control costs, the increases in the costs of reforestation have continued to rise. The average cost of \$372 for reforestation in 1984 compares to \$325 in 1983. This 14 percent increase in costs is due primarily to the higher costs of site preparation and planting on the remaining backlog acreage.

This program is consistent with the planned nursery seedling production for 1984 and recognizes the need to keep the current budgets levels as low as possible and still meet management objectives.

The 1984 estimate is planned to be financed with funds available from the 1983 deferral of \$108,035,000 and the Reforestation Trust Fund. See above "Source of Funding Table."

Object class information:

Salary	-11,500
Travel	-290
Transportation of things	-882
Supplies, materials and equipment	-1,033
Other contractual services	-745
Total	-14,450

Timber Stand Improvement (TSI)

Objective: To improve timber growth and protection by maintaining stock control and improving growth. Activities include release of desirable trees from competing vegetation, thinning, and fertilizing.

Program description: As of October 1, 1982, an estimated 1,685,000 acres needed a timber stand improvement treatment to improve the growth condition of the timber stands. Of this amount, 419,000 acres needed release and 1,266,000 acres needed thinning. It is estimated that TSI needs will be about 2,023,000 acres by 1985. Each year about 400,000 acres of new stands are created by reforestation and as these stands grow, many will need to be released from competing vegetation and/or precommercially thinned to maintain healthy, vigorous stand of trees.

Decrease for 1983:

		<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Decrease</u>
Timber stand				
improvement	\$	31,880	(28,274)	-3,606
	FTE	740	516	-224

A \$28,274,000 program, a decrease of \$3,606,000 will accomplish 188,000 acres of stand improvement work--a decrease of 53,000 acres. The average cost per acre in 1984 is estimated to be \$150. This is 16 percent higher than 1983, due primarily to non-salary cost increases. Although contractual costs have increased slightly, Forests have continued to emphasize cost-effectiveness by concentrating stand improvement work on those sites with the highest potential for future growth and the highest economic returns.

The 1984 estimate is planned to be financed from the 1983 deferral of \$108,035,000 and the Reforestation Trust Fund. See above "Source of Funding Table."

Object class information:

Salary	-4,480
Travel	-110
Transportation of things	-70
Supplies, materials and equipment	-80
Other contractual services	+1,134
Total	-3,606

Nursery and Tree Improvement Operations

Objective: To ensure the orderly development of timber production on commercial forest land in the National Forest System by improving the genetic quality of seed and planting stock and by producing high quality planting stock in appropriate numbers for reforesting timber lands in a timely manner.

Program description: Thirteen bare-root and five container nurseries are operated to produce high quality forest tree planting stock in adequate quantities to meet RPA goals and the requirements of the National Forest Management Act. Operation of these nurseries is funded through a Working Capital Fund.

Forest Tree Improvement programs have been implemented to varying degrees in all regions. The programs have two primary goals: (1) apply sound genetic principles to all silvicultural prescriptions; and (2) provide seed for seedling production that will yield adaptable, fast growing, high quality, pest resistant forest trees. Programs implemented by all regions include establishing seed collection zones and breeding zones based on physiographic and biological data. This will ensure that the seed is used in a locality where it is adapted and avoid losses due to poor planting stock. Other programs are implemented for selected species and zones where investments can be justified. These programs include tree selection, seed orchard establishment and management, plantation establishment and management, and selective breeding.

Decrease for 1983:

		1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
Nursery and tree improvement operations	\$	15,550	(15,110)	-440
	FTE	360	347	-13

The \$15,110,000, for fiscal year 1984, includes \$5,040,000 for nursery maintenance and minor improvements and \$10,070,000 for the tree improvement program. The decrease of \$440,000 will be absorbed by the nursery management program in recognition of the reduced level of seedling production needed for the 1984 reforestation program. The tree improvement program will be maintained at the same level as 1982 and 1983 which will concentrate upon the production of seeds and seedlings for improved planting stock and increased yields in the future.

Nursery construction requirements are displayed in the Construction section of this justification material.

The 1984 estimate is planned to be financed with funds available from the 1983 deferral of \$108,035,000 and the Reforestation Trust Fund. See the above "Source of Funding Table."

Object class information:

Salary	-206
Travel	-22
Transportation of things	-55
Supplies, materials and equipment	-75
Other contractual services	-82
Total	-440

Recreation Use

	1982 <u>Actual</u>	1983 Appropriation enacted to Date (Dollars	1984 Base in thousands)	1984 Estimate	Inc. (+) or Dec. (-) from Base
<u>Recreation Mgmt:</u>					
Developed recreation site use (million RVD's) 1/	84.3	85.0	85.0	85.0	—
Dispersed recreation use (including wilderness use) (million RVD's)	<u>149.1</u>	<u>155.0</u>	<u>155.0</u>	<u>155.0</u>	<u>—</u>
Total (million RVD's)	233.4	240.0	240.0	240.0	—
Public sector developed recreation sites million PAOT days	123.2	122.4	122.4	96.0	-26.4
Cost\$	78,804	83,211	86,143	77,798	-8,345
FTE	2,393	2,404	2,404	2,201	-203
<u>Wilderness Mgmt:</u>					
(million RVD's)					
Wilderness mgmt. (million acres)	25.1	25.1	25.1	25.2	+ .1
Costs\$	6,093	6,493	6,722	6,722	—
FTE	185	188	188	188	—
<u>Cultural Resource Mgmt:</u>					
Cultural resource inventories (million acres)	2.6	2.4	2.4	3.3	-.9
Costs\$	6,283	6,941	7,185	9,269	+2,084
FTE	<u>191</u>	<u>201</u>	<u>201</u>	<u>230</u>	<u>+29</u>
Total\$	91,180	96,645	100,050	93,789	-6,261
FTE	2,769	2,793	2,793	2,619	-174

1/ RVD Recreation Visitor Day

General: More outdoor recreation occurs on National Forest System lands than on any other federal property. Federal lands received 544 million visitor days in 1981, 43.3 percent (235 million visitor days) was provided by the Forest Service. Recreation use of the National Forests embodies the activities, services, and facilities necessary to accommodate approximately 235 million visitor-days of use. This use ranges from opportunities provided to senior citizens who spend many of their retirement hours camping at Forest Service campgrounds, to backpackers who find remote hiking trails to enjoy, to winter sports enthusiasts who flock to commercially operated ski areas located on the National Forests.

The Forest Service coordinates with entrepreneurs in the private sector and other government agencies to see that programs are complementary and there is no unnecessary duplication of facilities and services. The private sector is encouraged to develop and maintain the more urbanized public recreational facilities and compatible with National Forest System settings.

Recreation Management

Objective: To manage and protect the natural resources and facilities which will accommodate the public's demand emphasizing opportunities to know and experience nature; to maintain, facilities necessary to meet rising demands for recreation, utilizing private sector capital financing through concession arrangements when appropriated.

Program description: The Forest Service provides a variety of recreation opportunities for the enjoyment and health (mental and physical) of the public. One segment of the recreation program is the operation and maintenance of the following facilities:

	<u>Number</u>	<u>Capacity</u>
Family campgrounds	4,211	408,596
Group campgrounds	230	38,278
Family picnic grounds	1,360	88,815
Group picnic grounds	103	14,051
Swimming sites	310	72,725
Boat sites	976	89,426
Intrepretive and information	850	52,396
Observation and other sites	909	36,342
Winter sports sites	89	11,429

In 1982, one-quarter (57 million visitor days) of the total recreation use of National Forest System lands occurred at these Forest Service facilities.

The Forest Service also issues and administers permits to individuals and groups to provide additional recreation opportunities. In 1982, the number of permits for the private sector were:

Recreation residences	16,000
Winter sports resorts	165
Organization camps	492
Lodges and resorts	548
Outfitting and guiding	2,400
Other concession sites	141

These privately operated facilities provide one-tenth of the total recreation use on National Forest System lands.

Two-thirds of recreation use occurs away from facilities in the general forest area.

Major emphasis will continue to be place on providing economically efficient recreation opportunities and facilities. User fees will be charged for about 2,000 of the 6,000 National Forest System family camp grounds, group campgrounds, and swimming sites as authorized by the Land and Water Conservation Fund Act of 1965 as amended. The remainder either do not offer the amenities required by law for a charge area or are so small or so isolated that the cost of collection would be uneconomical or impractical. Recreation user fees collected in 1982 totaled \$11,198,935, a 31 percent increase over 1981. Receipts from recreation special uses increased by 30 percent to \$14,152,684.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Recreation management \$	86,143	77,798	-8,345
FTE	2,404	2,201	-203

A funding level of \$77,798,000, a reduction of \$8,345,000 from the base, will enable the Forest Service to operate approximately 96 million PAOT-days of managed facility use. PAOT-days is the capacity of Forest Service operated recreational facilities, expressed as Persons-At-One-Time, multiplied times the length in days of the managed season for each facility. The 96 million PAOT-days is a decrease from that planned for 1983. The reduced service portion of the program will be 63 million PAOT days.

Every effort will be made to keep facilities open for the major portion of the summer season. It will be necessary to carefully manage the program, primarily in the length of season, to Some facilities will be opened later and they may be closed sooner then in the past.

Object class information:

Salary	-4,060
Travel	-200
Suplies, materials and equipment	-1,000
Other contractual services	-3,085
Total	-8,345

Pinchot Institute for Conservation Studies

	1982 <u>Actual</u>	1983 Appropriation enacted to Date (Dollars in thousands)	1984 Base	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Pinchot Institute.....\$	470	500	524	270	-254

Objective: Restore and manage the Grey Towers National Historic Landmark as a unique cultural and historic resource for interpreting the development of American forestry and natural resources conservation; advance excellence in natural resource conservation and facilitate the use of the Institute and Grey Towers as a conference center and retreat site for conservation organizations and agencies; and provide a national urban forestry information/communications center focal point.

Program description: The Pinchot Institute for Conservation Studies is a special unit of the Forest Service located at the Grey Towers National Historic Landmark, Milford, Pennsylvania. Grey Towers is a 101-acre 19th century estate which was the home of Gifford Pinchot, pioneer conservationist, founder and first chief of the Forest Service and Governor of Pennsylvania. Examples of fiscal year 1982 accomplishments include:

1. Completed Master Site and Interpretation plan.
2. Gave Summer Evening Conservation Studies consisting of five programs to residents and visitors.
3. Drafted white paper on technology transfer.
4. Participated in planning national conference on Urban Forestry.
5. Provided tours and conferences for 20,000 visitors.

Plans for fiscal year 1983 include:

1. Conduct organized tours for about 20,000 visitors on a scheduled basis for seven days per week, June - October.
2. Develop a "Friends of Grey Towers" organization.
3. Host a seminar on natural resource conservation.
4. Maintain the Grey Towers National Historic Landmark.
5. Participate in planning and implementing a national urban forestry program.

In 1984 this program is eliminated as a separate line item within the State and

Private Forestry appropriation. It is proposed to fund the program from benefiting appropriations and functions and is displayed here (in the Recreation Use section) because Recreation Management is identified as the largest activity benefiting most from the program.

A table of activities funding the Pinchot Institute for 1984 follows:

Funding Table
Pinchot Institute - FY 1984
(Dollars in thousands)

Forest Research:

Fire and atmospheric sciences research.....	1
Forest insect and disease research.....	3
Renewable resources evaluation.....	2
Renewable resources economics.....	1
Trees and timber management research.....	3
Forest watershed management research.....	1
Wildlife, range and fish habitat research.....	2
Forest products utilization research.....	2
Forest engineering research.....	1
Total, Forest Research	\$ 16

State and Private Forestry:

Forest pest management.....	11
Fire protection	2
Forest management and utilization.....	2
Total, State and Private Forestry	\$ 15

National Forest System:

Forest fire protection.....	50
Sales administration and management.....	40
Recreation Management.....	112
Total, National Forest System	\$ 202

Construction:	\$ 37
---------------	-------

TOTAL, PINCHOT INSTITUTE	\$ 270
--------------------------	--------

Decrease for 1984:

	1984 Base	1984 Estimate	Decrease
Pinchot Institute.....\$	524	270	-254
FTE	9	5	-4

The \$254,000 reduction for fiscal year 1984 provides for a minimum level of activity at the institute. No tours will be conducted, although the estate will be open to visitors during regular work hours. Maintenance necessary to prevent deterioration will be provided.

Object class information:

Salary	-100
Travel	-23
Rents, communications and utilities	-18
Supplies, materials and equipment	-28
Other contractual services	-85
Total	-254

Wilderness Management

Objective: To provide for wilderness use, protect the wilderness resource, and minimize conflict between uses of wilderness and the wilderness values of solitude, naturalness, ecological, geological, and similar features of scientific, educational, or historical value; and to manage the resource to provide 11.8 million recreation visitor days.

Program description: The Forest Service manages 158 wilderness areas and nine primitive areas totaling 26.9 million acres or about 14 percent of all National Forest System lands. Recreation use of these areas was 11.2 million visitor days in 1982.

To accomplish the stated objectives and comply with the legislation regarding wilderness, it is cost-effective to inform visitors of rules and regulations through the use of maps, brochures, visitor registration or permits; manage and coordinate the variety of uses including mineral exploration, grazing and outfitting and guiding activities to preserve the wilderness resource; plan for the appropriate action necessary to manage wildfires to meet wilderness objectives; and take action necessary to remove trash and other evidences of man.

No change for 1984.

Cultural Resource Management

Objective: To protect and manage the cultural resources located on National Forest System lands and to implement the requirements of the National Historic Preservation Act, the National Environmental Policy Act, the Archaeological Resource Protection Act, and USDA regulations. To assist in meeting resource output targets in timber, range, minerals, and special uses.

Program description: To implement these requirements it is necessary to identify, evaluate, preserve (where appropriate), and interpret the remains of the Nation's historic and prehistoric past found on National Forest System lands in advance of all development projects. Archaeologists locate significant cultural resources and prescribe ways to implement other management projects without adversely

affecting the historic or cultural resource. More than 92 percent of cultural resource funding is for timber, minerals, and energy resource development programs.

Increase for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Cultural resource management ...\$	7,185	9,269	+2,084
FTE	201	230	+29

An increase of \$2,084,000 over the base will meet the inventory, evaluation and mitigation requirements for all National Forest activities with emphasis on the timber and minerals programs. Cultural resource funding for fiscal year 1984 will be used to support timber, mineral, energy and range programs.

Object class information:

Salary	+602
Travel	+146
Transportation of things	+282
Supplies, materials and equipment	+404
Other contractual services	+650
Total	+2,084

Wildlife and Fish Habitat Management

	1982	1983	1984	1984	Inc. (+) or Dec. (-) from Base
	<u>Actual</u>	<u>Appropriation enacted to Date</u> (Dollars in thousands)	<u>Base</u>	<u>Estimate</u>	
Wildlife and fisheries management and support	\$ 18,369	17,980	18,616	21,635	+3,019
FTE	525	485	485	565	+80
Wildlife habitat improvement	\$ 7,410	7,110	7,362	5,636	-1,726
(thousand acres)	173,465	148,900	148,900	134,400	-14,500
FTE	208	192	192	146	-46
Fish habitat improvement	\$ 6,078	6,075	6,292	5,129	-1,163
(thousand acres)	19,000	17,600	17,600	14,560	-3,040
FTE	172	164	164	134	-30
Endangered, threatened and sensitive species habitat improvement..	\$ 1,279	1,270	1,316	1,108	-208
(thousand acres)	2,465	3,480	3,480	3,575	+95
FTE	35	34	34	28	-6
Total	\$ 33,136	32,435	33,586	33,508	-78
FTE	940	875	875	873	-2

General: The Forest Service manages over 191 million acres, all of which are habitat for some species of wildlife and fish. Half the big game and cold water fish habitat in the nation are on National Forest System lands and waters. Sportsmen, naturalists, bird watchers, photographers and other persons are provided the opportunity to enjoy these animals in their natural habitat. National Forests become increasingly important to wildlife and fish enthusiasts of limited incomes, as more private lands are converted to other uses and the costs of hunting, fishing and nature study use on private lands increase. Some National Forest wildlife and fish resources have significant commercial values. Salmon are valued at over \$65 million annually. The American public was provided approximately 33.5 million wildlife and fish user days in 1982 valued at \$616,178,830.

National Forest System lands are managed to maintain self sustaining populations of all fish and wildlife and to improve habitats for certain species in public demand. Deer, elk, salmon, trout, and endangered species are among those desired by the American people. The maintenance and improvement of habitat increases the capability of the land to produce these and other species. Other resource programs such as timber management are designed and conducted in ways least harmful to wildlife and fish habitat.

Forest Service personnel work closely with other Federal, State and local agencies in planning activities that affect fish and wildlife on National Forest System lands. Comprehensive plans displaying habitat improvement and maintenance needs for wildlife and fish on National Forest System lands have been prepared jointly with State fish and wildlife departments.

Habitats for 68 Federally listed or proposed threatened or endangered species are being managed on National Forest System lands. In compliance with the Endangered

Species Act of 1973 (87 Stat. 884), inventories, planned habitat protection and improvement programs, including land ownership adjustment, are conducted for these species in cooperation with the Fish and Wildlife Service and the individual States. The sensitive species program gives special management attention to certain plants and animals to prevent reductions in habitat that would cause them to become Federally listed as threatened or endangered.

First priority in the wildlife and fish program is given to support of other resource activities such as timber sales to insure that complementary wildlife benefits are achieved and adverse affects are minimized. Priority is given to habitat concerns for salmon and steelhead, waterfowl, threatened and endangered species, and other species either low in number or significantly affected by other resource management programs. Continued emphasis will be given to big and resident fish upon public demand.

Wildlife and Fisheries Management and Support

Objectives:

1. To provide for administration of the wildlife and fish program.
2. To provide wildlife and fisheries expertise in planning all activities that affect wildlife and fish and their habitats for the purpose of mitigation or compensation of adverse impacts and habitat enhancement in compliance with policy and direction.
3. To assist in meeting targets for timber harvest, livestock grazing, outdoor recreation, and energy development in conjunction with wildlife and fish management goals and objectives.
4. To provide wildlife and fisheries outputs (increased habitat capability and wildlife and fish user days) from resource activities such as timber sales.

Program description: Program management including administration, information collection for land and resource plans, habitat inventories, monitoring, cooperation with States and other agencies and training is provided by this part of the program.

Wildlife and fisheries biologists work closely with other Forest Service personnel to minimize adverse impacts to wildlife and fish habitats, to assist in meeting targets for timber harvest, livestock grazing, outdoor recreation and energy development while concurrently providing wildlife and fish outputs.

Specific activities include: determine mitigation and compensation needs for other resource projects; provide streamside protection needs for fish habitats; design timber sales to meet wildlife habitat objectives; design habitat improvement plans for on-site mitigation using timber sale receipts; and modification of livestock grazing plans to assure big game as well as livestock forage is provided and streamside are protected. When the opportunities are available, habitat enhancement is also accomplished through support activities.

Increase for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Wildlife and fisheries			
management and support\$	18,616	21,635	+3,019
FTE	485	565	+80

Object class information:

Salaries	+1,755
Travel	+188
Transportation of things	+206
Supplies, materials and equipment.....	+292
Other contractual services	+578
Total	+3,019

An increase of \$3,019,000 in management and support is planned. The increase will meet the requirement to support an 11.6 bbf timber sales program and additional advanced sale preparation for higher volumes in 1985, 1986 and beyond. Support to timber sales of \$8,600,000 is provided. This support provides wildlife outputs at very low costs. Energy and minerals development support is \$982,100 to insure habitat losses are minimized. Support to range management is \$498,900 as improved livestock grazing systems give greater consideration to wildlife and fish.

A decrease of \$306,200 in land management planning is scheduled as Forest plans are completed. Studies, surveys, and cooperation with other agencies will be reduced slightly. Monitoring of activities in accordance with Forest plans will increase.

Wildlife Habitat Improvement

Objective: To maintain viable populations of wildlife species and increase populations of game and non-game species identified in the Resources Planning Act and assessment (RPA) and Forest Plans.

Program description: Activities are planned and conducted to increase the ability of habitat to provide the food, cover and reproductive requirements of wildlife. Deer, turkey, waterfowl and species which primarily occur on National Forest Systems lands such as elk, moose, mountain goats and bighorn sheep are given emphasis. Activities include prescribed burnings to increase forage, water developments, planting forage on big game winter ranges, and wetlands development for waterfowl. Maintenance of habitat improvements is included.

Program priorities are: 1) habitat improvement to offset losses from other resource activities, 2) riparian and wetlands habitat improvement, 3) Big game habitat improvement, 4) other game and non-game of high public interest, 6) non-game species habitat improvement.

Decrease for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
Wildlife habitat improvement	7,362	5,636	-1,726
FTE	195	146	-49

A decrease of \$1,726,000 is proposed in direct wildlife habitat improvement. Accomplishment will be reduced by 14,500 acres. Projects that can be accomplished with other funding methods such as K.V., CWFS other or timber sale support will not be conducted with these funds. Projects that mitigate impacts of other activities such as timber sales and minerals development will receive priority. Habitat improvement in areas not influenced by timber sales such as big game winter range, bighorn sheep or mountain goat ranges and wetlands will be lower in priority.

Object class information:

Salaries	-1,075
Travel	-96
Transportation of things	-106
Supplies, materials and equipment.....	-150
Other contractual services	-299
Total	-1,726

Fish Habitat Improvement

Objective: To maintain viable populations of fish species and increase populations of species identified in the Resource Planning Act program and assessment (RPA) and Forest Plans.

Program description: Activities are planned and conducted to increase the ability of National Forest lakes and streams to support fish populations. The emphasis is to increase salmon, steelhead, trout, bass and a variety of cold and warm water fish. Activities include the control of water quality to retain current fish populations and the placement of structures in lakes and streams to increase fish populations by improving the quality and amount of spawning and rearing habitat. This program supports and improves commercial, recreational and subsistence fishing. Maintenance of habitat improvement is included.

Decrease for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
Fish Habitat Improvement	6,292	5,129	-1,163
FTE	166	134	-32

A decrease of \$1,163,000 is proposed in direct fish habitat improvement. Accomplishment will be reduced by 3,040 acres. Projects in high productivity fish habitats that mitigate for other activities such as timber sales, minerals development and livestock grazing will receive the first priority. Projects that improve habitat for species of commercial value such as salmon and steelhead will receive the second priority. Projects for resident species such as trout and bass will receive a lower priority.

Object class information:

Salaries	-702
Travel	-69
Transportation of things	-75
Supplies, materials and equipment.....	-106
Other contractual services	-211
 Total	 -1,163

Endangered and Threatened and Sensitive Species Habitat Improvement

Objective: To protect or improve the status of endangered and threatened animals and plants and their habitat that occur on National Forest System lands. The major emphasis of the program is to protect and improve habitat with a minimum of impact on other resource programs. The Forest Service manages sensitive species of animals and plants to avoid declining populations, which could result in their becoming threatened or endangered.

Program description: Activities are planned to improve the habitat for endangered, threatened, and sensitive animals and plants. Inventory and monitoring of habitat in accordance with plans for those species to provide protection is an important part of this program. Maintenance of habitat improvement is included.

Activities include prescribed burning to develop breeding habitat for the Kirtland's warbler in Michigan, special timber management for spotted owls in California, Oregon and Washington, and the red-cockaded woodpecker in the southeast, and rehabilitating and protecting streams which contain threatened or endangered fish. The program also includes the identification of habitat for land acquisition.

Activities are prioritized; 1) to accomplish the requirements of the Endangered Species Act, 2) to prevent additional need for listing species, and 3) to change species status toward delisting.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Endangered, threatened and sensitive species			
habitat improvement ... \$	1,316	1,108	-208
FTE	34	28	-6

Accomplishment will be increased by 95 acres. Projects will be funded for endangered, threatened and sensitive species, in that order of priority.

Object class information:

Salaries	-154
Travel	-8
Transportation of things	-9
Supplies, materials and equipment.....	-12
Other contractual services	-25
Total	-208

Range Management

		<u>1982</u> <u>Actual</u>	1983 Appropriation Enacted to Date (Dollars in thousands)	1984 Base	1984 Estimate	(Inc. (+) or Dec. (-) from Base
Grazing program.....	\$	23,458	23,203	24,096	23,987	-109
Permitted Livestock grazing Use (MM AUMs)		9.90	9.82	9.82	9.82	—
	FTE	716	675	675	670	-5
Range improvements.....	\$	2,761	2,195	2,280	800	-1,480
Range forage improve- ment (thousand acres)		204 <u>1/</u>	97	97	105	-8
Range structural improvement (thous- and acres).....		2,597 <u>1/</u>	1,301	1,301	1,077	-229
	FTE	85	64	64	17	-47
Wild free-roaming horses & burro management....	\$	315	570	590	290	-300
	FTE	10	16	16	7	-9
Noxious weed control....	\$	753	400	415	415	—
(acres treated)		14,983	5,608	5,698	6,700	+1,092
	FTE	23	12	12	12	—
Total.....	\$	27,287	26,368	27,381	25,492	-1,889
	FTE	834	767	767	706	-61

Summary of funds available for the range program:

	<u>1982</u> <u>Actual</u>	<u>1983</u> <u>Planned</u>	<u>1984</u> <u>Estimated</u>
Range Management	\$27,287	26,368	25,492
Range Betterment Fund	\$ 6,583	5,800	5,200
Total	\$33,870	32,168	30,692

1/ Includes acres accomplished with fiscal year 1981 Range Betterment Fund carryover.

General: The Forest Service range program provides for sustained use by livestock and other herbivores; long-term requirements of wild horses and burros; and other herbivores; long-term requirements of wild horses and burros; and other ecosystem ecosystem attributes such as wildlife habitat, soil and water quality, watershed protection, and additional forage for non-game species. The program emphasizes grazing and other uses. It is guided by production efficiency analysis and the market value of forage. This program contributes to the quality of life for families and communities that are dependent on National Forest System range resources.

Grazing Program

Objectives:

1. Contribute to the economic well-being of rural residents by promoting stability of family ranches and farms in the areas of which National Forests and National Grasslands are a part of these family ranches and farms.
2. Produce range forage on National Forest System lands which will contribute substantially toward meeting national food needs.
3. Utilize National Forest System lands to demonstrate range management practices suitable for use on associated private lands.
4. Maintain the natural values of the range.
5. Promote cooperation and coordination among farmers, ranchers, government agencies, and others interested in making the most effective use of ranges in all ownership.

Program description: Livestock grazing affects 102 million acres of National Forest System land in 36 States. Our 1977 estimates were that 70 percent of the 54.4 million acres suitable for livestock grazing were in satisfactory ecological condition. (Ecological condition for the site is the degree of similarity between the present community and the potential natural community.)

<u>Ecological Condition</u>	<u>Acres of Suitable Range (millions)</u>
Good	13.1
Fair	25.0
Poor	14.2
Very Poor	<u>2.1</u>
Total	54.4

This estimate of ecological condition is updated as Forest land management plans are developed and implemented or as better information is obtained.

Range unsuitable for use by livestock because of unstable soils, steep topography, or inherent low potential for forage production may be suitable habitat for many wildlife species.

In 1982, there were 11,070 grazing allotments upon which 15,300 ranchers were authorized to graze 1,700,000 cattle and horses and 1,700,000 sheep. Eighty-four percent of the cattle permittees have base herds of 1 to 300 head and are highly dependent upon National Forest System lands to complement livestock ranching operations on their privately-owned lands. Without National Forest System grazing, many of these ranch operations would not be economically sound.

Revenue to the Federal treasury from the grazing program is expected to be approximately \$11.7 million in 1984, which is considerably less than the planned range expenditures. A direct comparison of range program receipts to range program expenditures does not take into consideration benefits such as wildlife habitat, soil and water quality, watershed protection, and additional forage for non-game species resulting from range management activities.

In fiscal year 1982, improved management was started on 705 allotments. Improved management is started when one or more management actions such as fence construction, brush control, or livestock water developments prescribed in the allotment plan have been completed. In fiscal year 1982, 6,886 or 62 percent of our allotments, were under improved management and adequately maintained. Improved management is adequately maintained if the management actions prescribed in the allotment management plan are being carried out according to a schedule that will not permit regression in range condition. Comparable figures for the period 1979 to 1982 are:

<u>Year</u>	<u>Total Allotments</u>	<u>Allotments With Improved Management Maintained</u>		<u>Number of Allotments With Improved Management Started By</u>
		<u>Number</u>	<u>Percent</u>	
1979	10,967	5,698	52	897
1980	10,754	5,378	59	1,236
1981	10,871	6,705	62	677
1982	11,069	6,886	62	705

Decrease for 1984:

		<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Grazing program.....	\$	24,096	23,987	-109
	FTE	675	670	-5

A decrease of \$109,000 will reduce range administration and place an emphasis on permittees assuming greater responsibility for livestock grazing management activities, including maintenance and implementation of allotment management

plans. Emphasis will be to maintain 9.82 million animal unit month grazing program and provide the necessary range management input to the land management planning process. Support for the timber and minerals programs will be provided.

In 1983, most allotments with improved management will be maintained by carrying out prescribed actions in the allotment plan. This will be in accordance to a schedule that will not permit regression in range condition. Improved management will be started on a limited number of allotments. The 1984 budget will permit continued maintenance of those allotments with improved management and few new starts. Where improved management cannot be maintained the result is unacceptable resource damage or downward trends in range condition. This can result in adjustments in livestock numbers or, in some cases, complete removal of permitted livestock.

Object class information:

Salary	-91
Travel	-2
Supplies, materials and equipment.....	-10
Other contractual services	-6
Total	-109

Range Forage and Structural Improvements

Objectives:

1. Improve the forage production capability of lands administered by the Forest Service to the extent benefits are commensurate with cost without impairing land productivity.
2. Maintain and improve soil and vegetation cover on National Forest System land to provide forage for livestock and other herbivores.
3. Identify and measure the relevant economic effects of range improvement programs, projects, and practices.

Program description: Range improvement means any facility or treatment constructed or installed for the purpose of improving the range resource or the management of livestock. Improvements include both installation of structural improvements, such as fencing and water developments, and nonstructural improvements, such as cover manipulation or plant control to improve forage conditions. In addition to improving the livestock grazing program these improvements often provide additional benefits such as improved wildlife habitat, soil and water quality, watershed protection, and additional forage for non-game species.

Most of the capital investments in the 16 western States will be accomplished under the Range Betterment Fund appropriation. The Federal Land Policy and Management Act of 1976, as amended by the Public Rangelands Improvement Act of 1978, directs that 50 percent of the moneys received by the United States as fees

for grazing livestock of National Forest in the 16 contiguous western States be credited to a separate account in the Treasury and when appropriated be made available for on-the-ground range rehabilitation, protection, and improvements. Planning and administration costs, as directed by legislation, are paid from the Range Management line item or other benefiting functions. Outputs and accomplishments are a combination of both Range Management and Range Betterment funds.

Investments for range improvements on the National Grasslands will be financed through Conservation Practices authorized by Title III of the Bankhead-Jones Farm Tenant Act of 1937.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Range forage and			
structural improvements\$	2,280	800	-1,480
FTE	64	17	-47

A decrease of \$1,480,000 for range forage and structural improvements can be made by financing these investments on the 16 western States from the Range Betterment Fund and on National Grasslands through the Conservation Practices program. The remaining \$800,000 will be used for investments on areas of highest priority in the two eastern Regions which do not receive Range Betterment Funds. Fifteen percent fewer acres will be treated by this program in fiscal year 1984.

Object class information:

Salary	-1,118
Travel	-75
Supplies, materials and equipment	-80
Other contractual services	-207
Total	-1,480

Wild Free-Roaming Horses and Burros

Objective: Manage, protect, and control wild free-roaming horses and burros on National Forest System lands in a manner which maintains a thriving ecological balance on the territories they inhabit.

Program description: The Forest Service protects, manages, and controls approximately 2,000 horses and burros on National Forest lands. All activities relating to wild horses and burros are coordinated with the Bureau of Land Management. Population level desired to achieve management objectives are based on wild horse and burro forage and habitat requirements in coordination with wildlife, permitted livestock, and other uses. Excess animals are removed by authorized personnel and, upon application, title for them is granted to individuals following one year of private maintenance and care under humane conditions.

In 1982, 440 excess wild horses and burros were removed from territories. This is approximately 110 percent of the annual natural increase. Scheduled removals for 1983 should bring most territory populations to a level that provides for preserving and maintaining a thriving natural ecological balance.

Decrease for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
Wild free-roaming			
horses and burros..... \$	590	290	-300
FTE	16	7	-9

A decrease of \$300,000 will still provide for removal of excess wild horses and burros including the natural increase in herd size. Other lower priority activities will be deferred to future years.

Object class information:

Salary	-135
Travel	-10
Supplies, materials and equipment	-80
Other contractual services	-75
Total	-300

Noxious Farm Weed Control

Objectives:

1. Control noxious weeds on National Forest System lands including reimbursement to local county and State weed control authorities pursuant to the Federal Noxious Weed Control Act of 1974 (43 U.S.C. 1242-43).

2. Establish and maintain beneficial plant cover on National Forest System lands as a means of limiting the invasion of specified noxious weeds onto adjacent private lands.

Program description: Many States have enabling legislation authorizing counties or other jurisdictions to establish weed control districts covering all or part of a county. Weed control districts are concerned with control of noxious weeds within the district regardless of land ownership. Appropriations for this activity will be used to control noxious weeds on National Forest System lands when the same species of noxious weeds are being controlled by the weed district on private lands (43 U.S.C. 1241-43).

No change for 1984.

Soil, Water and Air Management

		<u>1982</u> <u>Actual</u>	1983 Appropriation enacted to Date (Dollars in thousands)	1984 Base	1984 Estimate	Inc. (+) or Dec. (-) from Base
Soil, water and air administration.....	\$	19,550	18,275	18,815	20,486	+1,671
	FTE	605	466	466	506	+40
Soil and water resource improvement.....	\$	1,800	2,300	2,370	1,886	-484
(thousand acres).....		7.7	5.4	5.4	3.0	-2.4
	FTE	48	60	60	48	-12
Soil and water resource inventories.....	\$	10,665	7,473	7,695	5,604	-2,091
(thousand acres).....		15.9	13.7	13.7	9.3	-4.4
	FTE	207	190	190	138	-52
Total.....	\$	32,015	28,048	28,880	27,976	-904
	FTE	860	716	716	692	-24

General: The overall objectives of the soil, water, and air program are: to achieve water of suitable quality and quantity to meet public needs and desires; to provide for the continued production of other resources through protection and enhancement of soil productivity; and to comply with requirements of the Clean Air Act for maintaining or enhancing air quality. Maintenance or improvement of soil, water and air values results in direct benefits to the range, recreation, timber, and fish and wildlife resources, and the public's enjoyment and use of these resources.

The program is divided into the following three activity areas:

1. Soil, water and air administration.
2. Soil and water inventory.
3. Soil and water resource improvement.

Soil, Water and Air Administration

Objective: To utilize soil, water, and air expertise in meeting overall resource production and environmental goals.

Program description: The program for soil, water and air administration includes:

1. Application of soil, water, and air technology in the planning and implementation of resource management projects, including timber sales, recreation development, wildlife habitat improvement, range management, soil, water, and air resource improvement, and minerals and energy development.
2. Monitoring of soil, water and air resources to determine whether or not management goals for water and air quality and soil productivity are being met and to provide a basis for identifying more effective management practices.
3. Maintenance of existing soil, water and air resource improvements to ensure the continued effectiveness of these treatments.
4. Identification and quantification of water requirements for carrying out management responsibilities on the National Forest System, and securing water rights. Filing fees for, or purchase, of water rights may be funded from benefiting programs, including soil and water programs.
5. Coordination and liaison with other agencies' soil, water and air resource development plans and projects on or directly affecting the National Forest System.
6. Development of plans for emergency rehabilitation of acres damaged by wildfires, floods or other natural disasters.
7. Protection of air quality and monitoring Forest Service activities which may affect air quality.
8. Participation of soil, water and air scientists in the preparation of Regional and Forest land and resource management plans.

Increase for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Soil, water and air			
administration.....\$	18,815	20,486	+1,671
FTE	466	506	+40

The increase of \$1,671,000 in soil, water, and air administration will be used to fund initial staffing for the air management program and to strengthen other activities in the administration area. A more detailed description of how the funds will be utilized follows:

Project planning support --

Funding will be used to develop management prescriptions to protect soil productivity and water quality in the management of other resources. A total of \$7,817,000 is for project planning support; \$5,471,000 is for the preparation of 11.6 billion board feet in timber sales and \$2,346,000 is for the other resource programs.

Project implementation support -- This activity is followup of project planning to help assure that planned results are actually achieved on-the-ground. A total of \$6,223,000 is planned project implementation support; \$3,453,000 is for the harvest of 10.5 billion board feet of timber.

The increase in project implementation support will be used in the following manner:

- Monitoring to ensure that preventive practices have been applied to road construction and timber harvest activities as prescribed (\$487,000.)
- Monitoring the effectiveness of prescribed practices in meeting the requirements of the Clean Water Act (\$506,000).
- Participate in water rights allocation and adjudication proceedings and secure rights needed to carry out the timber management program (\$187,000).
- Maintaining existing soil and water improvements until they have stabilized (\$162,000).

Multi-resource programs -- An increase of \$317,000 for multi-resource program support will be used in the following manner:

- Securing multi-program water rights, (\$195,000).
- Providing liaison with water resource development activities of other agencies or private interests to incorporate protection of NFS land and water values as their activities are carried out, (\$122,000).

Object class information:

Salary and benefits	+970
Travel	+152
Supplies, materials and equipment.....	+234
Other contractual services	+315
Total	+1,671

Soil and Water Resource Improvement

Objective: Soil and water resource improvement projects are carried out to improve soil productivity and water quality, and provide for favorable conditions of water flow.

Program description: Soil and water improvement activities include erosion control structures, reshaping of gullied land, revegetation of denuded areas, and vegetation manipulation designed to increase water yield.

Decrease for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Decrease</u>
Soil and water resource			
improvement\$	2,370	1,886	-484
FTE	60	48	-12

The decrease of \$484,000 in improvement work will continue to allow for the base maintenance of improvements. Other lower priority items will be deferred and increased efficiencies will be made.

The proposed program will treat 3,000 acres producing the following benefits stream channel stabilization, watershed condition improvement, soil productivity increases, erosion reduction, and improving water quality.

The proposal includes \$280,000 for rehabilitation of lands in the Tahoe Basin acquired through the provisions of the Land and Water Conservation Fund and the Lake Tahoe Basin Acts. This will treat approximately 20% of the lands needing treatment.

Object class information:

Salary and benefits	-280
Travel	-45
Supplies, materials and equipment.....	-67
Other contractual services	-92
Total	-484

Soil and Water Resource Inventories

Objective: To provide information concerning soil and water condition for use in resource management activities and land management planning. This information is used to meet the basic stewardship responsibilities of assuring long-term soil productivity and the continued supply of high quality water.

Program description: These inventories collect, describe, map, and interpret basic soil and water resource information required to manage the National Forest System under the principles of multiple-use and sustained-yield. Examples of information provided by the inventories are:

1. Soil productivity and reforestation potentials.
2. Water yield and quality including timing of flows.
3. Extent and location of soils having erosion and stability problems.

Soil inventories are conducted at two general levels of intensity. Low intensity inventories provide for information used in planning and broad resource allocation. All lands need to be inventoried at this intensity. High intensity inventories are needed to provide information for use in areas where intensive management is planned. About half of the NFS lands will be covered by these inventories.

Status of Soil Resource Inventories:

<u>Mapped Type Inventory</u>	<u>Thousand Acres Inventory</u>			
	<u>Mapped through 1982</u>	<u>To be Mapped</u>	<u>1983 Planned</u>	<u>1984 Request</u>
Low intensity soil	128,055	47,790	4,070	2,385
High intensity soil	34,590	60,900	1,680	1,690
Water inventory 1/	---	---	7,950	5,225

1/ Water resource inventories are done to meet specific planning needs. The intensity and occurrence of future water resource inventory needs are dependent on the specific projects being planned.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Soil and water resource			
inventory.....\$	7,695	5,604	-2,091
FTE	190	138	-52

The decrease of \$2,091,000 will defer completion of soil and water inventories. A short-term reduction in accomplishments will not significantly reduce the quality of our land management activities, reduce water quality or soil productivity.

Object class information:

Salary	-1,225
Travel	-190
Supplies, materials and equipment.....	-300
Other contractual services	-376
Total	-2,091

National Forest System
3-Year Display
(Includes National Forest System and Construction Appropriations¹)

<u>Forest</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
		(Dollars in thousands)	
<u>Region 1</u>			
Beaverhead	\$ 3,289	3,406	3,406
Bitterroot	3,959	4,100	4,100
Clearwater	10,631	11,009	11,009
Custer	3,218	3,333	3,333
Deerlodge	2,661	2,755	2,755
Flathead	8,762	9,074	9,704
Gallatin	4,416	4,573	4,573
Helena	3,130	3,242	3,242
Idaho Panhandle	16,667	17,260	17,260
Kootenai	12,537	12,984	12,984
Lewis & Clark	2,965	3,071	3,071
Lolo	9,372	9,706	9,706
Nezperce	7,122	7,375	7,375
Subtotal	88,728	91,888	91,888
Regional Office	<u>25,831</u>	<u>26,753</u>	<u>26,936</u>
Region 1 Total <u>1/</u>	114,559	118,641	118,824
<u>Region 2</u>			
Arapaho-Roosevelt	5,126	5,546	5,546
Bighorn	3,519	3,807	3,807
Black Hills	6,424	6,950	6,950
Grand Mesa, Uncompangee and Gunnison	5,690	6,156	6,156
Medicine Bow	4,387	4,747	4,747
Nebraska	1,189	1,286	1,286
Pike-San Isabel	4,378	4,737	4,737
Rio Grande	5,380	5,821	5,821
Routt	3,356	3,631	3,631
San Juan	4,679	5,062	5,062
Shoshone	2,174	2,352	2,352
White River	3,739	4,045	4,045
Subtotal	50,041	54,140	54,140
Regional Office	<u>6,040</u>	<u>6,537</u>	<u>6,630</u>
Region 2 Total	56,081	60,677	60,770
<u>Region 3</u>			
Apache-Sitgreaves	9,318	9,858	9,858
Carson	4,483	4,743	4,743
Cibola	4,589	4,854	4,854
Coconino	7,134	7,547	7,547
Coronado	4,535	4,798	4,798

<u>Forest</u>	<u>1981</u>	<u>1982</u>	<u>1983*</u>
	(Dollars in thousands)		
<u>Region 3 con't.</u>			
Gila	4,926	5,211	5,211
Kaibab	5,243	5,547	5,547
Lincoln	3,575	3,782	3,782
Prescott	3,358	3,553	3,553
Santa Fe	4,728	5,002	5,002
Tonto	5,689	6,019	6,019
Subtotal	57,576	60,914	60,914
Regional Office	<u>9,063</u>	<u>9,586</u>	<u>9,695</u>
Region 3 Total <u>1/</u>	66,639	70,500	70,609
<u>Region 4</u>			
Ashley	3,294	3,533	3,533
Boise	8,434	9,045	9,045
Bridger-Teton	4,504	4,830	4,830
Caribou	2,599	2,787	2,787
Challis	2,563	2,749	2,749
Dixie	3,438	3,687	3,687
Fishlake	2,206	2,366	2,366
Humboldt	1,976	2,119	2,119
Manti-LaSal	2,820	3,025	3,025
Payette	6,651	7,132	7,132
Sawtooth	4,916	5,272	5,272
Salmon	3,947	4,232	4,232
Targhee	6,312	6,769	6,769
Toiyabe	3,386	3,631	3,631
Uinta	1,945	2,085	2,085
Wasatch-Cache	4,985	5,345	5,345
Subtotal	63,975	68,607	68,607
Regional Office	<u>13,161</u>	<u>14,114</u>	<u>14,241</u>
Region 4 Total <u>1/</u>	77,136	82,721	82,848
<u>Region 5</u>			
Angeles	10,636	10,469	10,469
Cleveland	6,667	6,562	6,562
Eldorado	8,899	8,759	8,759
Inyo	5,871	5,779	5,779
Klamath	13,909	13,690	13,690
Lassen	7,798	7,675	7,675
Los Padres	9,251	9,106	9,106
Mendocino	8,525	8,390	8,390
Modoc	5,520	5,433	5,433
Plumas	12,672	12,472	12,472
San Bernardino	10,594	10,427	10,427
Sequoia	10,196	10,035	10,035
Shasta-Trinity	18,478	18,187	18,187

<u>Forest</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
		(Dollars in thousands)	
<u>Region 5 con't.</u>			
Sierra	10,463	10,298	10,298
Six Rivers	10,120	9,961	9,961
Stanislaus	9,283	9,136	9,136
Tahoe	10,023	9,865	9,865
Lake Tahoe Basin Mgt. Unit	2,178	2,143	2,143
Subtotal	171,083	168,387	168,387
Regional Office	<u>30,272</u>	<u>29,795</u>	<u>30,100</u>
Region 5 Total	201,355	198,182	198,487
<u>Region 6</u>			
Colville	5,321	5,301	5,301
Deschutes	10,789	10,747	10,747
Fremont	6,573	6,548	6,548
Gifford Pinchot	14,057	14,004	14,004
Malheur	7,793	7,763	7,763
Mt. Baker-Snoqualmie	11,162	11,119	11,119
Mt. Hood	13,624	13,572	13,572
Ochoco	5,675	5,653	5,653
Okanogan	5,459	5,438	5,438
Olympic	9,851	9,814	9,814
Rogue River	8,280	8,248	8,248
Siskiyou	9,348	9,312	9,312
Siuslaw	11,246	11,203	11,203
Umatilla	6,502	6,477	6,477
Umpqua	10,553	10,513	10,513
Wallowa-Whitman	8,880	8,846	8,846
Wenatchee	10,168	10,129	10,129
Willamette	17,313	17,247	17,247
Winema	5,297	5,276	5,276
Subtotal	177,889	177,210	177,210
Regional Office	<u>57,533</u>	<u>57,312</u>	<u>57,673</u>
Region 6 Total <u>1/</u>	235,422	234,522	234,883
<u>Region 8</u>			
National Forests in Alabama	5,431	5,814	5,814
Caribbean	543	581	581
Chattahoochee-Oconee	6,102	6,532	6,532
Cherokee	5,626	6,022	6,022
Daniel Boone	6,172	6,607	6,607
National Forests in Florida	6,967	7,458	7,458
Francis Marion-Sumter	5,004	5,356	5,356
George Washington	6,074	6,502	6,502
Jefferson	5,393	5,773	5,773
Kisatchie	5,963	6,384	6,384
National Forests in Mississippi	6,904	7,390	7,390
National Forests in North Carolina	9,933	10,633	10,633

<u>Forest</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
(Dollars in thousands)			
<u>Region 8 con't.</u>			
Ouachita	9,188	9,835	9,835
Ozark-St. Francis	7,632	8,170	8,170
National Forests in Texas	5,408	5,789	5,789
Subtotal	92,337	98,846	98,846
Regional Office	<u>8,954</u>	<u>9,586</u>	<u>9,753</u>
Region 8 Total <u>1/</u>	101,291	108,432	108,599
<u>Region 9</u>			
Allegheny	3,959	4,149	4,149
Chequamegon	4,110	4,307	4,307
Chippewa	5,327	5,583	5,583
Green Mountain	1,975	2,070	2,070
Hiawatha	3,698	3,875	3,875
Huron-Manistee	4,306	4,513	4,513
Mark Twain	6,834	7,162	7,162
Monongahela	4,004	4,196	4,196
Nicolet	4,172	4,372	4,372
Ottawa	3,365	3,526	3,526
Shawnee	2,505	2,625	2,625
Superior	13,275	13,912	13,912
Wayne-Hoosier	2,635	2,761	2,761
White Mountain	3,081	3,229	3,229
Subtotal	63,246	66,280	66,280
Regional Office	<u>12,486</u>	<u>13,086</u>	<u>13,208</u>
Region 9 Total	75,732	79,366	79,488
<u>Region 10</u>			
Chugach	3,616	4,012	4,012
Tongass-Chatham	4,105	4,554	4,554
Tongass-Ketchikan	3,128	3,471	3,471
Tongass-Stikine	2,437	2,704	2,704
Subtotal	13,286	14,741	14,741
Regional Office	<u>3,315</u>	<u>3,678</u>	<u>3,706</u>
Region 10 Total	16,601	18,419	18,447
Total Regions	944,816	971,460	972,955
Washington Office	<u>39,906</u>	<u>52,804</u>	<u>52,863</u>
	\$ 984,722	\$1,024,264	\$1,025,818 <u>2/</u>

1/ Forests may not add to Regional total in 1982 column due to rounding.

2/ Includes the Reforestation Trust Fund.

General Administration

		<u>1982</u> <u>Actual</u>	<u>1983</u> <u>Estimate</u>	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Inc. (+)</u> <u>or Dec. (-)</u> <u>from Base</u>
(Dollars in thousands)						
Line Management	\$	37,998	39,452	41,030	40,453	-577
	FTE	916	914	914	904	-10
Program Support	\$	116,195	112,873	119,295	115,611	-3,684
	FTE	5,310	5,178	5,178	4,942	-236
Common Services	\$	88,097	103,668	106,006	101,546	-4,460
Total	\$	242,290	255,993	266,331	257,610	-8,721
	FTE	6,226	6,092	6,092	5,846	-246

General: General Administration consists of those managerial and support activities that cannot be readily identified with specific programs at the time they are planned. For financial planning, budgeting, and accounting purposes, these activities are financed by the General Administration line item. This avoids the need for assessing the other budget activities within National Forests System, Research, State and Private Forestry, Construction, and Land Acquisition for the cost of General Administration.

The activities included in the General Administration program do not directly produce outputs of goods or services. They provide essential managerial and technical support to those individuals and organizational components involved in the protection and management of the resources that produce goods and services. The Line Management, Program Support, and Common Services discussed in the following sections represent that share of the General Administration cost which contributes to the accomplishment of programs financed from Research, State and Private Forestry, National Forest System, Construction, and Land Acquisition appropriations.

Line Management

		<u>1982</u>	<u>1983</u>	<u>1984</u>
Washington Office	\$	685	613	637
	FTE	14	12	12
Field Offices	\$	37,313	38,839	39,816
	FTE	902	902	892
Total	\$	37,998	39,452	40,453
	FTE	916	914	904

Objective: To provide the direction and management of a variety of Forest Service programs to insure that they are carried out efficiently, properly coordinated, and respond to national, regional and local needs.

Program description: All costs of the following line management positions including secretarial support, are attributed to General Administration:

1. Chief, Associate Chief, Deputy and Associate Deputy Chiefs of Administration and Programs and Legislation.
2. Regional Foresters and Deputies for Administration or Deputy Regional Foresters in Regions having only one primary Deputy.
3. Station Directors, Deputy Directors and the Assistant Directors for Planning and Applications and Support Services.
4. Area Director.
5. Forest Supervisors and Deputy Forest Supervisors.
6. District Rangers.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Line Management.....\$	41,030	40,453	-577
FTE	914	904	-10

The decrease of \$577,000 in line management is the result of a reduction of ten positions in Line Management. One Deputy Forest Supervisor position in each of the Regions (except Alaska) will be abolished. This will account for eight full time positions. The other two positions are the result of the Southern (FS) - Southeastern Area (S&PF) merger.

Object class information:

Salary	-560
Travel.....	-17
Total	-577

Program Support

<u>Washington Office</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
Legislative Affairs\$	446	421	440
FTE	12	12	12
Program Development and Budget\$	1,123	1,238	1,247
FTE	31	31	30
RPA, Environmental Coordination and Policy Analysis\$	1,373	1,415	1,390
FTE	36	35	33
Personnel Management\$	1,996	2,043	2,037
FTE	66	67	64
Civil Rights\$	371	332	346
FTE	9	9	9
Volunteer and Hosted Employment Programs.....\$	249	175	182
FTE	7	3	3
Computer Science, Communication and Information Systems Management.....\$	2,486	2,979	2,937
FTE	75	82	79
Procurement and Property Management.....\$	1,040	874	878
FTE	27	27	26
Accounting, Fiscal Management and Law Enforcement.....\$	1,833	1,530	1,521
FTE	50	42	40
Management Analysis and Support.....\$	1,067	904	901
FTE	23	23	22
Public Information and Involvement.....\$	1,276	1,293	1,315
FTE	40	38	37
Other W.O. Support\$	384	291	302
FTE	<u>11</u>	<u>8</u>	<u>8</u>
Total Washington Office.....\$	13,644	13,495	13,496
FTE	387	377	363
Field Offices\$	102,551	99,378	102,115
FTE	<u>4,923</u>	<u>4,801</u>	<u>4,579</u>
Total Program Support.....\$	116,195	112,873	115,611
FTE	<u>5,310</u>	<u>5,178</u>	<u>4,942</u>

Objective: To provide the necessary support to efficiently and effectively carry out Forest Service programs and be responsive to requirements of the Executive Branch and Congress on policy and budget matters involving forestry.

Program description: Program support funding includes the salaries, travel, training and career development of program support staffs. The program support staffs include program planning/development and budget, RPA coordination, information offices, personnel management, administrative services, administrative management, fiscal and accounting, civil rights, and other general purpose support staff.

As outlined in the narrative section concerning field offices support services, not all of the Washington Office staff activities described as General Administration exist at the field level or if they do exist they are more readily identified with the benefitting program and are funded as such.

Legislative Affairs

Legislative Affairs is staffed by resource professionals and clerical support with the primary responsibility of analyzing proposed legislation and providing information to assist the Executive Branch and the Congress in the consideration and enactment of needed legislation.

In carrying out this responsibility the Legislative Affairs personnel:

1. Prepare proposals for new or amended legislation as part of the Department's Legislative Program. (20-25 proposals per year)
2. Prepare reports stating the Department of Agriculture's position on proposed legislation in response to requests from congressional committees or from the Office of Management and Budget. (80-90 legislative reports per year)
3. Prepare testimony and supporting briefing materials for Departmental witnesses in preparation for congressional hearings. Also prepares followup information that may be requested by the committees. (50-60 hearings per year)
4. Respond to telephone requests from congressional offices for information on Forest Service activities. (2,000 to 3,000 calls per year)
5. Keep Forest Service personnel informed on the status of legislation and assists in understanding the legislative process by providing information and training.

Program Development and Budget

Program Development and Budget is the process for transforming Forest Service authorities, missions and goals into specific program objectives, outputs, targets, and workforce and funding requirements. The budget reflects the on-the-ground needs and provides the basis for presenting and justifying Forest Service programs to the Department, Office of Management and Budget, and Congress. Once the Appropriation Bill is signed, work accomplishments are tracked quarterly in relation to funded program objectives and output targets. At the end of the year, an evaluation of work completed and dollars obligated is completed and presented to management.

Various tasks are required to accomplish this process.

1. Program Development and Analysis - The budget process starts with field units developing budget proposals based on annual planning direction, the RPA Program, and local plans. Based on cost/effective analysis and overall national needs, various budget alternatives are developed at each organizational level. These are then used in developing alternative National proposals for the Forest Service.
2. Budget Documents and Presentation - The Forest Service budget proposals are negotiated with the Secretary and the Office of Management and Budget and incorporated in the President's annual budget. Detailed explanatory notes justifying the budget proposals are prepared for use by the Congressional Appropriation Committees. Witness statements, briefing and display material are prepared for appropriation committee hearings. Additional information is developed in response to requests from the staff and members of the Appropriation Committees, as well as requests from other Legislative members and staff dealing with such issues as budget reconciliation.
3. Budget Execution - Funds, outputs, targets, and personnel ceilings are allocated to field units in line with the direction contained in the Appropriation Act and Committee reports. Periodically, financial needs are projected, and requests are submitted to the Department and OMB for apportionments and outlay ceilings.

Justifications supporting reprogramming requests are prepared for review and approval by the Congressional Appropriation Committees. Emergency funding needs are handled as they occur during the year.

Close coordination is required with sponsor agencies transferring funds to the Forest Service to carry on certain programs such as Job Corps, Watershed Planning and Flood Prevention.

4. Accountability and Control - On a periodic basis the Program Development and Budget staff conducts reviews of field units program planning and budget activities. Necessary training for field units is also conducted by this staff.

On a quarterly basis, Program Development and Budget staff analyzes program target accomplishments in relation to plans and expenditure of funds. Results are presented to line officers with recommendation for followup action.

In addition, Program Development and Budget staff provides various automated systems support to all Forest Service users of the Program Development and Budgeting and RPA processes.

5. Annual Report to Congress - As required by the Forest and Rangeland Renewable Resource Planning Act of 1974, an annual report is prepared to analyze Forest Service accomplishments and resource conditions in relation to the Recommended RPA Program. It is submitted to Congress for their information and use in carrying out their oversight responsibilities.

RPA, Environmental Coordination and Policy Analysis

The Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA) requires the Secretary of Agriculture to prepare an overall assessment of the Nation's renewable resources situation every 10 years. It includes projections of the future demand and supply of timber and other forest-related resources. In response to the assessment, the Act also requires the Secretary to prepare a long range RPA Program every 5 years. Based on analysis of several alternatives, cost effectiveness, and public comments, the Secretary selects a Recommended RPA Program which includes an output and funding level for Forest Service programs that is responsive to the future needs of the American people. The Act requires coordination with other Federal and State agencies and organizations avoid duplication of effort. The Program becomes the basis for future annual budget proposals. The first RPA Assessment and Program were completed in 1975, the second assessment in 1979, and the second Program in 1980.

Work is now underway to supplement the 1979 RPA Assessment to reflect significant changes that have occurred and to prepare the 1985 RPA Program. To meet the 1985 due date to Congress, the following major tasks must be completed in fiscal year 1984:

1. Complete preparation of the Supplement to the 1979 RPA Assessment. This supplement will update the basic assumptions on population and economic activity used in formulating resource supply and demand projections, and present changes in the expected supply and demand situation for renewable resources. New data and analysis techniques will be incorporated.
2. Assemble and integrate the data and information from Forest land and resource management plans, State forest resource plans and identified research planning into a data base to be used to prepare the 1985 RPA program. Development of the 1985 RPA program includes assembly of economic, social, and environmental data for analyses to determine program effects. This national data base must also be validated to assure that information developed from Forest, State, and Research plans will consistently and accurately tie the 1985 RPA program to on-the-ground capabilities.
3. Complete the Draft 1985 RPA Program and Draft Environmental Impact Statement to accompany this Program. These documents will go through a

formal public involvement process with thorough review by national interest groups, as well as the general public. Following this public review, comments will be incorporated into development of a recommended program. Impacts of the program will be analyzed, it will be reviewed with decision makers, and the final 1985 RPA Program and environmental statement will be written. These documents are scheduled to be published in December of 1984.

4. Continue ongoing discussion and reviews with congressional staffs, other agencies, national interest groups, and other public and private entities, so that these groups and individuals continue to understand and be a part of the 1985 RPA update.

At the national level, the Environmental Coordination staff:

1. Provides national direction to field units and the Washington Office on the implementation of NEPA.
2. Coordinate with EPA, CEQ, and other Federal agencies on environmental matters affecting natural resources and the National Forest System.
3. Advises the Chief on national policies to implement NEPA and provides technical assistance to the Washington Office and field offices in carrying out NEPA responsibilities.
4. Provides training to Washington Office and field personnel to assure their understanding of NEPA and NEPA procedures, CEQ regulations, and Forest Service policy.
5. Reviews 100-120 environmental assessments and environmental impact statements (EIS) involving national and/or controversial issues for their adequacy in meeting the intent of the law, regulations, and procedures.
6. Coordinates the review within the Forest Service of approximately 150 EIS's prepared by other Federal agencies involving projects affecting Forest Service programs or National Forest System lands.
7. Files EIS's with the Environmental Protection Agency (EPA) which are the responsibility of the Chief and the Secretary of Agriculture, and publishes notices of availability of environmental documents and/or hearings relative to EIS's which have been made available for public review.
8. Serves as liaison with CEQ and EPA to ensure that national policies and directives of Forest Service are consistent with Government-wide policies.

Policy Analysis

The Policy Analysis (PA) staff conducts indepth analyses and studies of high priority policy issues. The general approach is to collect pertinent data, do an objective analysis, and develop and evaluate alternatives for consideration by policy makers. Their work assignments consist of the following:

1. Requests from USDA, OMB, and Congress. Each year the Forest Service receives requests from the Department, OMB, and Congress to do special analyses and studies on policy issues that are of national and/or international concern. Three examples include examining opportunities to increase user fees on a cost effective basis, examining a process for analyzing various fire budget levels, and reviewing the effects of timber sales on world markets.
2. The need for New or Revised Policy. Forest Service policies frequently need to be reviewed and changed to keep them in tune with changing conditions and responsive to people's needs. As policies are questioned, high priority policy issues are assigned to the PA staff to develop alternatives needed to support decisions on policy matter. Examples include the cutting of firewood from National Forest System lands, developing economic analyses procedures, and examining the need for preroads prior to timber sales.
3. Program Evaluation. Forest Service ongoing programs are periodically evaluated to determine if they are meeting public needs and expectations in an economically efficient manner and providing the public benefits desired. Priority program evaluations are assigned to PA where detailed economic, efficiency, and public need analyses are required. The results are used to determine whether program changes are needed. Examples include the use of fire retardants and effects of minerals developments on National Forest management.

During 1984, policy and program evaluations will be directed toward determining priorities and identifying additional opportunities to increase efficiency and reduce costs.

Personnel Management

The Personnel Management (PM) program is involved in recruiting, developing, and maintaining an effective Forest Service work force for the accomplishment of Forest Service programs. These activities include staffing, classification, pay administration, employee development, employee relations, labor-management relations, performance evaluations, awards, insurance, retirement, attendance, and safety and health. In FY 1982, PM processed over 123,000 personnel actions. These actions included the hiring of 800 permanent employees, 16,000 temporary employees, and over 1,200 others in special programs. More than 14,000 positions were reviewed to ensure proper classification and over 75 program reviews were conducted to ensure merit compliance. In addition, over 1,200,000 Time and Attendance Reports were audited and submitted for payment and over 2,000 grievance/adverse action appeals were processed. In fiscal year 1984, the size of the workload is expected to continue at the prior year's level.

In addition to the operational and developmental programs listed above, the Civil Service Reform Act (P.L. 95-454) places demands on the personnel program. For example, the Forest Service has approximately 2,500 employees covered by merit pay, and Personnel Management plans to continue its emphasis on the system to increase its efficiency and effectiveness. There are approximately 60 senior executives in the Forest Service. Personnel Management must provide support in identifying and developing candidates for the Senior Executive Service. In addition, the Forest Service must ensure that the 35,000 permanent employees in the Forest Service understand the performance system and how it applies to them and to subordinates. This requires that Personnel Management have high levels of expertise in the area of development and operation of performance appraisal systems, which are important to the overall management of the Federal work force.

Computer technology represents a major opportunity to improve the efficiency and quality of Personnel Management. The Forest Service will start "direct entry" of both personnel actions and time and attendance reports to the National Finance Center (NFC) during F.Y. 1983 which will improve timeliness and accuracy. In addition, the Forest Service will develop automated systems for classification and performance standards. Even though these systems are expensive to develop, they will easily pay for themselves in reduced personnel requirements and increased quality and timeliness.

There is a current and continuing emphasis by the Office of Personnel Management (OPM) and the Department on classification accuracy. Outback management, budget reductions, ceiling restrictions, and organization issues will continue as major impacts on the classification program. In addition, the new Factor Evaluation System (FES) requires the evaluation and conversion of all positions in the Federal Government to this new classification system as new classification standards are reissued.

The staffing function is guided by the Uniform Guidelines for Employee Selection Procedures (5 CFR 900.61 Appendix B). Selections must be based on documented job analyses, adverse impact analyses must be conducted, and evaluation procedures must follow guidelines. It is critical that Personnel Management maintain a quality staffing procedure while improving its efficiency.

Labor relations personnel work includes contacts with fourteen American Federation of Government Employees bargaining units, one National Association of Government Employee's bargaining unit and one consolidated National Federation of Federal Employee's unit which combines eighty local units. Fifteen thousand employees are represented nationwide and negotiations and hearings are conducted annually.

The employee development program involves awards, training, and the employee assistance program for alcohol and drug abuse. In fiscal year 1982, 6,271 employees received awards for performance that resulted in tangible benefits to the Forest Service of \$89,758,496. It is estimated that over 35,000 training forms will be processed in fiscal year 1984.

Personnel Management will continue to promote safety and health activities. This includes compliance with the Occupational Safety and Health Act in order to reduce workers compensation claims, accidents, and illnesses.

Civil Rights

The Civil Rights program in the Forest Service supports the programs and activities that by law require attention to equal employment and equal access for all citizens. The civil rights concerns are a part of every major activity in the Forest Service.

The Equal Access Program covers Forest Service activities directly benefiting the public. The purpose of this activity is to insure that all publics have access to Forest Service programs, and that services are provided without discrimination. Examples of Forest Service programs identified under this activity are: assistance to minority landowners, minority grazing participation, minority recreation use, cooperative protection, human resource programs, research grants and contracting opportunities.

During the 1981 program year, these activities resulted in the following participation rates for minorities and women: assistance to minority landowners (total of 5013 assists); minority grazing (total of 180,729 livestock grazed involving 337,070 animal unit months usage); minority recreation visitor days (total of 7,000,000); Job Corps (57% combined minority/women participation); Senior Conservation Employment Program (18% minority - 30% women); Minority Prime Contracting (16.245 mil.); women-owned small business (11.117 mil.). The Agency also conducts over 2300 compliance reviews of recipients under its Title VI authority.

The Equal Employment Opportunity Program of the Forest Service:

- Provides equal opportunity in employment for all persons to compete on the basis of merit;
- Prohibits discrimination in employment and all personnel operations;
- Promotes full realization of employment opportunity through a continuing Affirmative Action Program.

The Agency's innovative approaches are represented largely by the four noncompetitive hiring authorities charted below. Nearly 1300 Forest Service employees are working under these authorities.

Data as of 9/1/82

	<u>Total Employees</u>	<u>Minority</u>	<u>Female</u>
Cooperative Education	605	174	370
Worker-Trainee	433	196	199
Vietnam Readajustment Auth. (VRA)	200	73	81
Handicap Authority	<u>56</u>	<u>3</u>	<u>20</u>
Total	1,294	446	670

The Agency also has 300 employees in Upward Mobility positions. The majority of these employees are in technician and/or administrative jobs.

The major laws and regulations associated with Forest Service programs which require civil rights attention are: The Civil Rights Act of 1964, as amended by Public Law 92-261 of 1972; the National Environmental Policy Act of 1969 as amended, the American Indian Religious Freedom Act Public Law 95-341; the National Forest Management Act 1976; Public Law 94-588; and Sections 503 and 504 of the Rehabilitation Act of 1973.

Volunteers and Hosted Employment Programs

The Forest Service provides opportunities for many individuals to participate in its activities through the Volunteers in the National Forests and Hosted employment programs. The overall administration of these programs is financed by General Administration.

These programs provide enrollees with opportunities to accomplish conservation work in fields such as land, water, recreation, wildlife, emergencies, timber stand improvement, and erosion control. Most of the work performed by these groups or individuals helps the Forest Service with the backlog of conservation work that would not otherwise be done.

As a by-product, these efforts provide retired persons opportunities to become involved in meaningful productive activities and utilizes their skills and talents. Working adults enjoy a change of scene in their leisure hours and satisfaction from voluntarily making contribution to the conservation of the Nation's natural resources. Many of the younger enrollees are provided an opportunity for their first work experience.

The Volunteers in the National Forests program does not provide a salary to its participants. However, it allows unlimited opportunities for interested persons to contribute their talents, knowledge and expertise toward the accomplishment of Forest Service activities and at the same time gain valuable work experience. More and more individuals with special skills are applying. They require careful and selective placement. Also becoming increasingly popular are linkages with community organizations which result in volunteer groups taking on special projects such as adopt-a-trail projects.

During FY 1982, 42,570 persons, from all walks of life, participated in the Volunteers program. Approximately 25 percent were women and 12 percent were minorities. They contributed 1,238 person years of work valued at \$15 million. This contribution was valuable to the Forest Service in helping to alleviate the backlog of work in reforestation, timber stand improvement, fish and wildlife habitat, recreation, and other activities necessary to maintain our natural resource base.

Hosted employment programs are those programs where the Forest Service serves as a host agency for cooperative programs administered by State and local governments. Hosted human resource programs include College Work Study, Work Incentive Program, Vocational Work Study, and programs formerly authorized under CETA and now implemented under direct grants to States.

During 1982, 8,014 persons participated in these cooperative programs; approximately 27 percent were women and 32 percent were minorities. Program participants accomplished 723 person-years of conservation work valued at more than \$7.8 million.

Computer Science, Communications and Information Systems Management

The Forest Service programs in computer science, communications and data management guide the use of these new technologies toward the accomplishment of established goals and targets for the agency. These programs help the Forest Service increase productivity to meet an increasing workload and maintain an acceptable level of service to the public. Intensive ADP and communications support for the collection, processing, storage and transmission of data is needed for the Forest Service to meet public needs.

The activities supported represent a broad range of Forest Service programs and administrative functions. These include the RPA Assessment and Program, Regional planning, forest land and resources management plans and budget development, execution and financial management. Policies for the management of computers, communications and information are in conformance with the provisions of the Paperwork Reduction Act of 1980, the Brooks Act and regulations of OMB, GSA and the Secretary of Agriculture.

In order to reduce the impact that the decrease in staffing has had on the Agency and to maintain the outputs that are required to reach the program goals, the expansion and use of automatic data processing and telecommunications facilities must be an integral part of Agency plans. In 1980, the National Facilities Needs Analysis (NFNA) was developed, describing the information processing requirements for the National Forest System's programs for the period 1983-86. The NFNA together with Regional plans from the framework for the implementation of distributed processing which will support all programs activities.

Other activities include the identification of information needs, development of inventories of information sources and planning for information systems; development of standards for data and information; coordination, analysis, editing, publishing and distribution of directives; forms and reports management; creation, use and disposition of records; security of data and information and costing and developing information budgets.

Software development and acquisition is managed to assure that cost effective, state-of-the-art methods and standards are applied. Policies, guidelines and standards are provided to aid designers and developers of software to ensure efficient design and programming and to make error detection easier and more effective.

The management of communications (voice/radio/data communications) is necessary to provide support to Forest Service programs for the protection and utilization of National Forest System and other public lands and as a transmission link for ADP activities. Effective radio communications networks are essential to insure the efficient and safe operation of fire prevention and suppression activities on National Forest System lands and in other emergency situations requiring the protection of life and property.

Procurement and Property Management

The procurement and property management functions in the Forest Service provide direct support to program managers for the acquisition, utilization and disposition of a wide variety of goods and services. The small procurement and property management function is to provide program managers with needed goods and services, on time, within the framework of laws, regulations and sound business practices.

The procurement and property management functions of the Forest Service are decentralized to the greatest degree practicable with effective management. This decentralized operation places procurement and property managers in more direct contact with program managers, enabling better control of these activities, quicker response to problem situations and local problem resolution. The Forest Service commitment to the Small Business program is enhanced by the ability of local procurement and property managers to locate and encourage small businesses to participate in Government contracts. Leases for space are more easily acquired and administered by local personnel and problems more readily resolved.

There are presently over 150 locations at which contract actions take place and in excess of 750 locations at which small purchase, accountability, and/or management of personal and real property is exercised.

The Forest Service acquires and manages a large number of different items, ranging from general office supplies to sophisticated data processing and scientific equipment. The agency's role as a world leader in the development of new techniques and equipment for cost effective fire fighting and insect and disease control is supported by procurement and property managers acquiring the items and services needed. Research in methods of more effective utilization of wood and wood products is closely supported by arranging for the purchase, loan, lease or transfer of needed equipment and arrangements for services of qualified individuals.

This program is designed to provide support at the program level, thereby allowing the program manager to concentrate on program accomplishment rather than support activities. Procurement and property managers are equipped and located to provide immediate supply management support for forest fires, floods, and other emergencies involving the National Forests.

In fiscal year 1984, the projected workload includes:

- Acquisition of goods and services - over 500,000 transactions totaling in excess of \$500 million in value.
- Management of personal property (utilization surveys, security, excess acquisition and disposal, rehabilitation) on hand or to be acquired, with a total value in excess of \$500 million.
- Acquisition of leased space, under delegated leasing authority, for Forest Service activities, including the leasing of offices, warehouses, storage lots, corrals and land. Over 800 leases are in effect with an annual rental exceeding \$12 million.

- Management of Forest Service occupied space in buildings under the control of the General Services Administration. Nearly 4 million square feet with a Standard Level User Charge in excess of \$25 million are involved.

The principal statute governing the procurement and property management function in the Forest Service is the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 471 et. seq.). There are a number of other laws which affect the Forest Service procurement and property management program. These generally enhance the basic law to meet particular Forest Service requirements or, in a few cases, exempt the Forest Service from application of the Federal Property and Administrative Services Act. Application of the laws, their implementing regulations and supplementing regulations of GSA and the Department of Agriculture, requires a coordinated and integrated program extending to all levels of the Forest Service.

Accounting, Fiscal Management and Law Enforcement

This activity includes accounting and financial management, fiscal management, internal control and review, cash and debt management, claims administration and law enforcement functions. These functions are carried out as required by the Budget and Accounting Procedures Act of 1950, the National Forest Management Act of 1976, and various other laws and regulations under Titles 7, 16, 18, 31, and 41 of the U.S.C.

Internal accounting and financial reports are provided to approximately 200 national forests, research stations, and State and private area offices. External accounting and financial reports are furnished to OMB, Treasury, and approximately 20 other government agencies and departmental offices. In 1982, the Forest Service operated cash and obligations control procedures for 36 separate receipt accounts, 104 administrative appropriations, including prior year appropriations. In addition, an internal accounting, file system, and payment computation process, both historical and current, is maintained to support payments to States and counties of 25 percent of all receipts derived from the 155 National Forests and 19 Grasslands.

Fiscal policies and procedures are formulated for all Forest Service programs to assure compliance with legal and other Agency requirements (GAO, Treasury, OMB). Through direction and review this activity assures proper use of the many available appropriations and trust funds, proper distribution of receipts and provides direction and oversight of the fiscal and administrative aspects of financial assistance programs. The Forest Service processed and awarded 1,950 financial assistance documents during 1982.

Internal control and review encompass a number of functions necessary to protect the Government against fraud, waste, and abuse from both internal and external sources in the fiscal and accounting activities Service-wide. A comprehensive review system is in place to ascertain compliance with applicable laws, regulations, and policies. Emphasis is placed on those fiscal and accounting functions with high susceptibility to fraud, waste, and abuse. Fiscal and Accounting Management program reviews are made on a minimum 4 year cycle. An average of 325 such reviews are made each year. In addition, activity reviews of fiscal and accounting functions are conducted where a need for more in-depth analysis is identified for specific functions. It is estimated that at least 50 activity reviews are made annually.

Estimated Service-wide summary of additional categories which require Fiscal and Accounting Management and law enforcement general administrative workload and expertise:

<u>Types of transaction or category of work</u>	<u>Estimated Number</u>
Grants & agreements	3,400
State indirect cost rate negotiations	13
Fuelwood permits	925,000 <u>1/</u>
Timber sales	44,000
Permits, leases, and licenses	132,600
Operator cost verifications	150
Recreation permit and gross fixed asset reviews	125
Travel authorizations issued	20,000 <u>2/</u>
Billings issued	460,000 <u>3/</u>
Internal and external accounting reports	
Number of reports	81
Number of users	36,300
Law enforcement violation notices issued	250,000

1/ Represents actual 1982 issues. Projected FY 1984 will reduce to approximately 500,000 with new charge policy in effect for FY 1983.

2/ Represents estimated number for FY 1984 based on new travel regulations.

3/ Assumes that fuelwood charge permits will be combined and a bill for collection will summarize daily or weekly issues. If not, this figure could increase by 350,000.

Management Analysis and Support

This activity encompasses program management, management improvement, work force management, and organization and management systems. These function are essential to the administration of an organization as large, complex, and decentralized as the Forest Service.

The management improvement program involves conducting and coordinating national studies to improve Forest Service efficiency and effectiveness. This includes studies in work simplification, work measurement, methods and procedures, and benefit/cost analysis in the area of natural resource management and administration. These program performance and/or cost reduction studies are done in accordance with OMB Circular A-117. New emphasis has been placed on cost reduction efforts and the development and maintenance of productivity measurement. This activity also includes evaluation and transfer of new management technology and skills throughout the agency.

The organization, position management and work force management systems activity provides for orderly changes in organizational unit structures and staffing patterns service-wide, to respond to new initiatives and changes in program emphasis, and to improve organizational performance. This activity also meets the provisions of OMB Circular A-64, and covers over 29,000 permanent, and nearly 15,000 temporary, full-time equivalent (FTE) positions, organized into 9 National Forest System (NFS) regional offices, 122 forest supervisor offices, 653 ranger districts, 8 forest and range experiment stations, the Forest Products Laboratory, about 90 research field locations, and one area office for State and Private Forestry (S&PF) cooperative programs. In fiscal year 1982, key results of the activity led to the reorganization of several major offices to streamline operations and enhance productivity. For example, several of the NFS regional offices were reorganized to reduce cost and the Regional Office and S&PF Area Office in Atlanta were consolidated to provide unity of direction, leadership, and control of Federal forestry programs in the South.

External accounting, auditing, and financial and cost analysis encompasses a number of accounting and review functions performed to give managers at all levels information requested and needed to carryout their respective responsibilities.

Cash and debt management activities are necessary to improve the timing of payments and collection of revenues. Collections were \$700 million in 1982 and are expected to increase during 1983 and 1984. Aggressive debt collection procedures minimize overdue accounts and have generated \$250,000 in receipts from interest.

The law enforcement program is designed to protect natural resources, Federal property on the National Forests, and Forest Service employees. This requires the maintenance and enforcement of regulations (36 CFR 261) and enforcement of elements of the Federal Criminal Code (16 U.S.C. and 18 U.S.C.). The program also includes investigation of internal matters referred to the agency by the Inspector General. In 1982 the Forest Service conducted 61 internal investigations as requested by the Inspector General. The number of internal investigations is expected to increase during 1984 to approximately 80 cases.

The current value of timber, archeological artifacts, and the economic losses associated with wildland arson, require increase emphasis to reduce economic losses and social impacts associated with criminal activity. The use of National Forest System (NFS) lands to illegally cultivate marijuana is of particular concern. Substantial increases in use of NFS land to produce cultivated marijuana could continue unless the recently implemented prevention program is continued. Reduction of on-site social and resource impacts will lag behind decreases in marijuana production.

Redemption of Forest Service responsibility requires coordination with other Federal law enforcement agencies including the Federal Bureau of Investigation, Federal Marshal's Service, Secret Service, and others. Liaison with the U.S. Attorneys and the Federal Magistrates Division, are other important activities. The NFS is in proprietary jurisdiction. Liaison and coordination with 43 State law enforcement agencies is essential to assure a reasonable level of protection for National Forest visitors and their property. Annually, more than 2 million violations of Federal law or regulation occur on NFS lands. An estimated 250,000 violation notices are issued, with an average \$35 forfeiture of collateral. At the present time, 102 special agents and 3,500 others redeem the Forest Service law enforcement duties.

When identifiable, the benefiting budget line items bears the cost of the day-to-day work of preventing violations and dealing with violators. The multifunctional coordination activities and criminal investigations conducted by criminal investigators are financed from General Administration.

Coordination of Office of Inspector General audits and followup action in response to audit recommendations are functions that help improve performance by eliminating fraud, waste and abuse. Planning, direction and leadership is provided to maintain and improve the effectiveness of the Forest Service Management Review System which also meets the requirements of OMB Circular A-44.

Leadership is provided in work force management planning to assure that the most efficient and effective ways of doing business are employed in the accomplishment of agency goals.

Program management is the administration of functions such as: administering the rental rate process to provide 4,546 Government-furnished rental quarters to house 3,000 permanent and 16,000 temporary employees each year in accordance with 5 U.S.C. 5911, and OMB Circular A-45; furnishing technical support in office systems analysis, design and coordination; and assure commercial or industrial products and services are obtained at lowest costs as required by OMB Circular A-76. In addition, program management includes the administration of the advisory committee management program required by the Federal Advisory Committee Act, P.L. 92-463 and the Farm Bill, P.L. 95-113; coordination of the national meetings management program in compliance with OMB Circular A-124; coordination of Federal financial assistance and direct Federal development programs in compliance with E.O. 12372; and the Catalog of Federal Domestic Assistance under OMB Circular A-89. Also included is the publication of the National organization directory and Management Notes; coordination with Federal Executive Board and Federal Regional Council activities; and the preservation and documentation of historical data.

Public Information and Involvement

These activities form the means by which the Forest Service and the public carry on a continuing discussion of agency plans, policies, and actions related to natural resources. The agency provides information on how the government is managing the Nation's natural resources in ways that benefit the taxpayer. It provides opportunities for the public to learn about the wise use of these natural resources, and it provides a process by which the public can respond to proposed Forest Service policies, plans, and actions. This two-way flow of public information and public response is required by several laws designed to give the citizens an effective voice in the running of the government. Most notable of these laws are the Department of Agriculture Organic Act, the National Environmental Policy Act, and the Forest and Rangeland Renewable Resources Planning Act.

Current information activities provide details to the public on programs, policies, and actions related to Forest Service's management of the National Forest System and conduct of cooperative forestry and forestry research. These activities are carried out through the mass media and through informed Forest Service and Departmental personnel. About 60 percent of this effort is directed toward providing information to press, radio, TV, and motion picture outlets for broad dissemination to the public. This activity also prepares speeches for delivery by Forest Service and Department leaders that are rendered to a broad spectrum of key audiences both locally, nationally and internationally. Since virtually every Forest Service employee and a number of Department people speak to the public about the agency program at one time or another, an estimated 20 percent of current information activity is devoted to internal communications.

The publications management activity provides national direction and coordination of Forest Service publishing and printing programs, and provides or procures editing, printing/duplicating, and distribution of all publications, forms, posters, and administrative documents originating in the Forest Service. The outputs of this activity are primarily publications that (1) report and describe scientific and technical information generated by Research and State and Private Forestry to meet the needs of forest managers, forest products processors, woodlot owners, and the scientific community; (2) inform the public of National Forest System planning activities and involve interested citizens and groups in the

decisionmaking process; (3) inform forest visitors and users about availability of services and recreation opportunities, personally and environmentally safe ways to enjoy facilities and natural resources, regulations and use restrictions; and (4) provide general information on how the agency manages, protects, and utilizes the forest and range resource.

The goal of public involvement and education work area is to achieve better agency decisions through the exchange of information with the public. Activities in this area include the use of a variety of techniques to create a dialogue between the agency and its public related to upcoming decisions and land use planning, natural resource research program formulation, environmentally sensitive projects, and other agency action. This effort is in support of the National Environmental Policy Act which requires full opportunity for the public to be involved in the various stages of the decisionmaking process on environmentally sensitive issues.

The agency also achieves its public involvement and education goal through the Woodsy Owl Environmental Campaign. This educational public service program helps natural resource managers accomplish their objectives with savings in both personnel and funds. Woodsy Owl asks for public cooperation to reduce solid waste, vandalism and other adverse impacts on the lands.

Audio-visual activities play a vital role in supporting the public information and involvement programs of the Forest Service and the Department. The importance of this activity is shown by communications research which indicates that about 80 percent of all learning is accomplished through visual aids.

Other W.O. Support Services

The International Forestry Staff provides General Administrative support by acting as liaison with international organizations, foreign governments, other Federal departments and agencies, and non-government groups for coordination of international forestry programs and activities. In addition, the staff monitors and manages all Forest Service foreign travel, arranges for Forest Service participation in international meetings, represents the Chief and top staff in inter-agency meetings dealing with foreign forestry affairs, serves as liaison and principal contact point with foreign countries through their embassies and consulates, and cooperates with numerous associations and societies on international forestry matters.

Also included is the responsibility for coordination and liaison in defense and emergency operations. The Forest Service is responsible for pre-emergency preparedness and emergency operations on Federal and non-Federal land for prevention and control of fires; determination of damage to forested areas resulting from enemy attack; emergency protection, management, and utilization of National Forest timber, range, water and related resources; emergency production, availability, and utilization of timber and timber products; determining and reporting resources needed to carry out these activities; and defense preparedness and emergency operations research.

Field Offices (Program Support)

Most of the General Administration activities previously described in the Washington Office section are also performed and funded as general administration in the region, station and area headquarters and to a lesser extent at the supervisor's headquarters, research field locations, and ranger district headquarters. There are some exceptions such as RPA (except the overall coordination) and environmental coordination. These duties, when performed at locations other than the Washington Office, can be readily identified with the benefiting activity. Also, within some of the administrative groups there are activities that can be readily identified with the benefiting program and funded

accordingly. Examples are timber sale accounting, timber cost collection, and concessionaire audits. These activities are performed by the Fiscal and Accounting Management group but are financed from the benefiting activity. Conversely, there may be positions located in areas other than the typical administrative units that perform General Administration duties in that they cannot be readily identified with the benefiting program and are properly funded from all funds available to the unit. Duties of this nature that exceed 20% of the individuals workload are properly funded from General Administration. An example is a Forest Fire Staff that has safety and health responsibilities exceeding 20% of that individuals workload.

Typical regional office administrative groups that are financed in whole or partially from General Administration are:

1. Planning and Budget
2. Office of Information
3. Civil Rights
4. Administrative Services
5. Fiscal and Accounting Management
6. Law Enforcement (coordination only)
7. Human Resources Programs (coordination of volunteers and Host programs)
8. Personnel Management
9. Management Systems

A typical research station headquarters has:

1. Planning and Application
2. Administrative Management
3. Computer Systems
4. Information Services
5. Administrative Services
6. Budget and Fiscal
7. Personnel Management

General Administration activities at a forest supervisors' headquarters are:

1. Personnel
2. Budget
3. Fiscal and Accounting
4. Administrative Services
5. Computer Services (portion)

All ranger districts would have at least one clerk that is General Administration. Larger districts may have an administrative assistant, one or two clerks, personnel officer, and a procurement specialist.

Most research field locations have business management personnel that are funded from General Administration. However, in some cases, such as singular funded field locations, business management support services can be readily identified with the benefiting activity and can be charged direct to that research program.

Job Corps Centers are examples where all business management activities are funded by the benefiting program (Job Corps) and not General Administration.

Decrease for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Program support.....\$	119,295	115,611	-3,684
FTE	5,178	4,942	-236

The estimate for FY 1984 General Administration Program Support was determined to be that which is needed to support Forest Service programs. The FTE reduction will be accomplished through several actions. The Washington Office will be taking the same proportionate reduction in personnel as the field units.

The General Administration services now being conducted at the Pacific Northwest and Intermountain Station Headquarters will be performed by Region 6 and Region 4 respectively. This will reduce the need for several General Administration FTE's. Other opportunities for shared services are being explored, including reducing some services.

A Service-wide working group on General Administration was convened in May, 1982 and identified several activities that were being charged to General Administration that could be readily identified with the benefiting program. The Chief of the Forest Service directed that these activities be removed from General Administration by Fiscal year 1985; some of the work group recommendations will be carried out in Fiscal Year 1984, resulting in several FTE's being charged to benefiting programs rather than General Administration.

Additional reductions in FTE's in Program Support will be accomplished by charging directly to benefiting programs or abolishing positions through attrition.

In addition, opportunities for greater efficiencies through field and W.O. organization consolidations will be explored.

Object class information:

Salary	-3,573
Travel	-111
Total	-3,684

Common Services

	<u>1982</u>	<u>1983</u>	<u>1984</u>
Rents, communications and utilities ..\$	39,274	44,023	40,200
Contractual services	\$ 5,735	10,739	10,227
Equipment and supplies	\$ 13,650	16,507	16,169
Office of Workers Compensation Program	\$ 9,470	11,041	12,564
National Finance Center.....	\$ 15,540	16,870	17,713
Other USDA services	\$ 4,428	4,488	4,673
Total, Common Services.....	\$ 88,097	103,668	101,546

Objective: To finance those services that are common to General Administration or that otherwise meet the definition of General Administration in that they cannot be identified with a specific program.

Program description:

Communication - Communication services funded in Common services include the transmission of messages and data from place to place, e.g., contractual charges for radio and wireless telegraph service, and telephone and telegraph services, switchboard and service charges, telephone installation costs, and rental of teletype equipment.

Included in the communications item is postage and mail. The agency policy is to classify mail at the least expensive rate possible consistent with the mailer's need and to manage mail in a manner which will provide the most effective, economical and reliable mail service. The payment for postage and mail is based on the exact amount of postage as recorded by a metered-mail system.

Rents and utilities - These are space rentals and utilities for facilities owned or leased by the Forest Service. General Administration is responsible for that portion that supports general administrative activities. Total office space owned or leased by the Forest Service is a little over 4 million square feet. In addition to the space owned or leased by the Forest Service, a little over 3 million square feet of space is covered by the Standard Level User Charge (SLUC) and payment is made to GSA. Only that portion of the total space that supports general administrative activities is charged to General Administration.

Contractual services: This includes obligations for budget object class 25 (other services) except those that are otherwise specifically identified such as National Finance Center. Included here are items such as publication of notices, tuition, operation of facilities or other service contracts, temporary and nontemporary storage of household goods. Other items included here are office equipment repair and maintenance contracts. Also included are ADP on-line retrieval services and ADP data processing services and supplies. The General Administration portion of the distributed data processing equipment is included here. This was \$3,000,000 in fiscal year 1983 and will be \$1,688,000 in fiscal year 1984.

Equipment and supplies - Most of the general office supplies are charged to General Administration since it would be difficult to determine the benefiting function.

Office of Workers Compensation Program -This program is administered by the Office of Workers' Compensation Program (OWCP) in the Department of Labor. It provides compensation benefits to civilian employees of the United States for disability due to personal injury sustained while in the performance of duty or for employment related disease. Benefits are also provided to dependents if the injury or disease causes the employees death.

National Finance Center - The National Finance Center (NFC) is a Department of Agriculture service center and provides essential payment and accounting services for agencies within the Department. The Forest Service obtains the services of complete administrative payment processing, payroll computation, payment, and related reports, plus required accounting records and financial reports. Utilizing revolving fund financing, NFC establishes use rates for Agency charges to recover costs and operate on a non-profit basis as closely as possible. The budget for NFC is included and justified in the USDA and Related Agencies Appropriation Act.

Other USDA services: This covers the miscellaneous services provided for the Forest Service by the Department of Agriculture. Examples are Growth Capital, Video Film Center, various personnel programs, and Office of Information Resources Management (OIRM). These costs are distributed to the various agencies within the Department based on the volume of business generated by the Forest Service in comparison to the total workload.

Decrease for 1984:

	1984 Base	1984 Estimate	Decrease
Common Services.....\$	106,006	101,546	-4,460

Certain Common Services continue to increase at a rate much higher than the normal inflation rate. An example is Office of Workers Compensation (OWCP) which is expected to increase by \$1,523,000 over FY 1983 or an increase of 12%. This reflects continued increases in the cost of the injury and illness compensation programs due to accelerating medical and hospital expenses. The National Finance Center's (NFC) operating costs are projected to increase by 5% over FY 1983 expenses. The Forest Service share is 53% of the total NFC costs.

Rents, communications, and utilities continue to increase at a higher rate than normal inflation rate. These costs are expected to increase by 12% in FY 1984 over FY 1983. Due to the uncontrollability of these items, a large portion of the GA budget must be committed to Common Services, thereby reducing our flexibility in Line Management, and Program Support.

The decrease in Common Services of \$4,460,000 is the result of a decision to move toward implementation of the revised GA policy in FY 1984. This policy being one that requires charging certain administrative costs direct to the benefiting program where it can be readily identified. This revised policy is to be fully implemented by FY 1985.

Object class information:

Rents, communications, and utilities.....	-6,161
Equipment and Supplies.....	-338
Workers Compensation.....	+1,523
Other contractual services.....	+516
Total	-4,460

NATIONAL FOREST SYSTEM

Program and Financing (in thousands of dollars)

Identification code	12-1106-0-1-302	1982 actual	1983 est.	1984 est.
Program by activities:				
Direct program:				
1.	Land and resource protection	325,236	346,192	337,537
2.	Renewable resource management and utilization	441,425	430,443	456,520
3.	General administration	241,856	255,440	248,815
4.	Youth conservation corps		3,400	
	Total, direct program	1,008,517	1,035,475	1,042,872
	Reimbursable program	34,403	35,000	36,000
10.00	Total obligations	1,042,920	1,070,475	1,078,872
Financing:				
Offsetting collections from:				
11.00	Federal funds	-24,709	-24,800	-25,500
13.00	Trust funds		-108,035	-61,896
14.00	Non-Federal sources	-9,694	-10,200	-10,500
21.40	Unobligated balance available, start of year	-9,769	-7,698	-113,035
22.40	Unobligated balance transferred from other accounts	-38		
24.40	Unobligated balance available, end of year	7,698	113,035	4,900
25.00	Unobligated balance lapsing	42,689		
39.00	Budget authority	1,049,097	1,032,777	872,841
Budget authority:				
40.00	Appropriation	1,049,097	1,010,436	872,841
42.00	Transferred from other accounts		3,400	
43.00	Appropriation (adjusted)	1,049,097	1,013,836	872,841
44.10	Supplemental for wage-board pay raises		552	
44.20	Supplemental for civilian pay raises		18,389	
Relation of obligations to outlays:				
71.00	Obligations incurred, net	1,008,517	927,440	980,976
72.40	Obligated balance, start of year	141,207	110,743	2,030
74.40	Obligated balance, end of year	-110,743	-2,030	-105,390
90.00	Outlays, excluding pay raise supplemental	1,038,981	1,017,970	876,858
91.10	Outlays from wage-board pay raise supplemental		552	
91.20	Outlays from civilian pay raise supplemental		17,631	758

NATIONAL FOREST SYSTEM

Object Classification (In thousands of dollars)

Identification code 12-1106-0-1-302	1982 actual	1983 est.	1984 est
Direct obligations:			
Personnel compensation:			
11.1 Full-time permanent.....	406,354	445,486	424,116
11.3 Other than full-time permanent.....	142,165	113,296	95,938
11.5 Other personnel compensation.....	22,328	23,221	20,757
11.8 Special personal services payments.....	2,698	2,806	2,750
11.9 Total personnel compensation.....	573,545	584,809	543,561
12.1 Personnel benefits: Civilian.....	67,759	66,640	66,600
13.0 Benefits for former personnel.....	-154	5,000	5,000
21.0 Travel and transportation of persons.....	21,729	24,619	27,005
22.0 Transportation of things.....	9,358	10,313	10,760
23.1 Standard level user charges.....	8,624	23,469	20,896
23.2 Communications, utilities, and other rent....	51,238	53,466	58,916
24.0 Printing and reproduction.....	4,482	4,539	5,154
25.0 Other services.....	189,446	179,038	200,739
26.0 Supplies and materials.....	50,781	50,962	58,391
31.0 Equipment.....	21,589	22,792	24,825
32.0 Lands and structures.....	7,654	7,735	18,801
33.0 Investments and loans.....	-1		
41.0 Grants, subsidies, and contributions.....	78	80	90
42.0 Insurance claims and indemnities.....	851	860	979
44.0 Refunds.....	26	28	30
99.0 Subtotal, direct obligations.....	1,007,005	1,034,350	1,041,747
Reimbursable obligations:			
Personnel compensation:			
11.1 Full-time permanent.....	4,750	5,597	5,298
11.3 Other than full-time ¹	13,897	13,796	14,867
11.5 Other personnel compensation.....	804	836	869
11.8 Special personal services payments.....	61	63	66
11.9 Total personnel compensation.....	19,512	20,292	21,100
12.1 Personnel benefits: Civilian.....	1,672	1,652	1,673
13.0 Benefits for former personnel.....	3	3	3
21.0 Travel and transportation of persons.....	544	537	544
22.0 Transportation of things.....	105	104	105
23.1 Standard level user charges.....	300	296	300
23.2 Communications, utilities, and other rent....	478	472	478
24.0 Printing and reproduction.....	386	381	386
25.0 Other services.....	7,753	7,658	7,758
26.0 Supplies and materials.....	2,488	2,457	2,490
31.0 Equipment.....	332	328	332
32.0 Lands and structures.....	619	611	620
41.0 Grants, subsidies, and contributions.....	36	36	36
42.0 Insurance claims and indemnities.....	6	6	6
44.0 Refunds.....	169	167	169
99.0 Subtotal, reimbursable obligations.....	34,403	35,000	36,000

NATIONAL FOREST SYSTEM

ALLOCATION TO THE BUREAU OF LAND MANAGEMENT

Personnel compensation:				
11.1	Full-time permanent	204	154	147
11.3	Other than full-time permanent	762	574	581
11.5	Other personnel compensation	2	2	2
11.9	Total personnel compensation	968	730	730
12.1	Personnel benefits: Civilian	12	9	9
21.0	Travel and transportation of persons	337	244	244
22.0	Transportation of things	79	58	58
26.0	Supplies and materials	105	76	76
31.0	Equipment	11	8	8
99.0	Subtotal obligations, Bureau of Land Management	1,512	1,125	1,125
99.9	Total obligations	1,042,920	1,070,475	1,078,872

* Includes cost of SCSEP enrollees not included in Personnel Summary.

Personnel Summary

Direct:				
	Total number of permanent positions	16,959	17,885	16,360
	Total compensable workyears:			
	Full-time equivalent employment	26,648	26,596	25,708
	Full-time equivalent of overtime and holiday hours	886	1,780	1,650
	Average ES salary	\$58,500	\$61,122	\$61,122
	Average GS grade	9.60	9.60	9.60
	Average GS salary	\$23,960	\$24,900	\$25,900
	Average salary of ungraded positions	\$14,572	\$15,200	\$15,800
Reimbursable:				
	Total number of permanent positions	187	212	193
	Total compensable workyears:			
	Full-time equivalent employment	288	290	279
	Full-time equivalent of overtime and holiday hours	33	80	60
	Average ES salary	\$58,500	\$61,122	\$61,122
	Average GS grade	10.50	10.50	10.50
	Average GS salary	\$25,401	\$26,400	\$27,450
	Average salary of ungraded positions	\$14,572	\$15,200	\$15,800

ALLOCATION ACCOUNTS

	Total number of permanent positions	9	7	6
	Total compensable workyears:			
	Full-time equivalent employment	46	35	33
	Full-time equivalent of overtime and holiday hours	2	2	2
	Average ES salary	\$58,500	\$61,122	\$61,122
	Average GS grade	9.50	9.50	9.50
	Average GS salary	\$22,660	\$23,566	\$24,500

CONSTRUCTION

	1982 <u>Actual</u>	1983 Appn. <u>to Date</u>	1984 <u>RPA</u>	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from 1983</u>	Inc. (+) or Dec. (-) <u>from Base</u>
			(Dollars in thousands)				
Construction of facilities ..\$	17,853	26,316	109,450	---	18,459	-7,857	+18,459
FTE	214	244	---	---	158	-86	+158
Road Const. ...\$	236,204	241,251	339,900	---	218,650	-22,601	+218,650
FTE	5,157	5,130	---	---	4,727	-403	+4,727
Trail Const. ..\$	4,038	4,864	15,480	---	5,182	+318	+5,182
FTE	91	110	---	---	115	+5	+115
Chugach Natives Inc.....\$	3,000	9,000	---	---	---	-9,000	---
FTE	---	---	---	---	---	---	---
Total\$	261,095	281,431	464,830	---	242,291	-39,140	+242,291
FTE	5,462	5,484	---	---	5,000	-484	+5,000

Appropriation Summary Statement

The construction program provides, as authorized by the legislation listed below, for the acquisition, restoration, replacement, construction and improvement of buildings, utility systems, dams, recreation facilities, roads, bridges, trails, and other physical facilities, including land acquisition for administrative sites when a part of the total project costs. Development projects, other than these, which are an integral part of the operating and research programs, are not included in this appropriation, but are financed from the regular operating and research program. Minor, unforeseen projects needed for fire administrative or other sites and estimated to cost less than \$50,000 may be financed from regular benefiting program funds.

Authorities:

Act of June 4, 1897, as amended (16 U.S.C. 473)
Construction for Administration, Protection and Management.
(05-96) 12-1103 302 SAGR HAGR

Such sums as are appropriated by Congress. No expiration date specified.

P.L. 88-657, Act of 10/13/64 (National Forest Roads and trails Systems Act 16 U.S.C. 535); P.L. 94-588, (National Forest Management Act 16 U.S.C. 472a and P.L. 93-378 (Forest and Rangeland Renewable Resources Planning Act as amended, 16 U.S.C. 1601.)
Section 4 (2)

P.L. 81-478 Granger-thye Act of April 24, 1950 (16 U.S.C. 571c)

Section 1

Erect buildings, lookout towers and other structures on non-Federal land where a long term right of use is secured.

Such sums as are needed, no expiration date specified

Timber roads constructed by timber purchasers

(05-96)12-2263 302 SAGR HAGR

Such sums as are appropriated by Congress. No expiration date specified.

P.L. 89-106, The Act of August 4, 1965 (7 U.S.C. 2250a)

Section 1

Erection and leasing of buildings, structures and land from non-federal sources.

Such sums as are appropriated. No expiration date.

P.L. 95-307 The Forest and Rangerland Renewable Resources Research Act of 1978, as amended, (16 U.S.C. 1643(a)) Section 3

Construction

Such sums as are appropriated by Congress. No expiration date specified.

P.L. 94-148, Act of December 12, 1975, (16 U.S.C. 565a-1 through a-3)

Joint construction via Cooperative Agreements

Such sums as are appropriated. No expiration date.

P.L. 95-619, National Energy Conservation Policy Act, (42 U.S.C. 8259)

Section 549

Retrofit of facilities for energy conservation.

Such sums as are appropriated by Congress. Expires January 1, 1990.

Construction of Facilities

	1982 <u>Actual</u>	1983 Appropriation Enacted to Date (Dollars in thousands)	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Research					
construction.....\$	388	450	--	422	+422
FTE	4	4	--	4	+4
Construction for fire, administration and other purposes.....\$	12,394	16,106	--	14,845	+14,845
FTE	100	120	--	110	+110
Recreation					
construction.....\$	5,071	9,760	--	3,192	+3,192
FTE	110	120	--	44	+44
Total.....\$	17,853	26,316	--	18,459	+18,459
FTE	214	244	--	158	+158

General: This program consists of construction, replacement, and improvement of buildings and other facilities to support Research, State and Private Forestry, and National Forest System activities. Small, portable structures such as trailers are considered personal property and are not included in Construction of facilities.

Research Construction

Objective: To provide improvement and construction of laboratory and other facilities needed to carry out the Forest Service research mission.

Program Description: Forest Service scientists are responsible for developing technology that will improve productivity of the Nation's forest and rangelands. To accomplish this task, scientists need physical facilities and equipment which provide the maximum safety possible commensurate with the type of research being performed.

Research progress reasonably expected to accrue from adequate research facilities will increase productivity in forestry, provide for resource development and use, and conserve and protect our resource base. At the same time, adequate facilities allow greater depth in research investigations, eliminate unsafe working conditions, and provide advantages of consolidation (e.g., critical mass of expertise, etc.). Facilities are strategically located to permit Federal scientists to interact with university scientists to assure a comprehensive, coordinated attack on the problems.

Increase for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Increase</u>
Research Construction.....\$	--	422	+422
FTE	--	4	+4

The proposed projects are included in Exhibit 1. The fiscal year 1984 program will emphasize safety and health. This includes providing facilities for proper use and storage of hazardous chemicals and flammables, installing fire alarm systems, replacing unsafe electrical wiring, and eliminating other health and safety hazards.

Object class information:

Salary	+98
Supplies, materials and equipment	+20
Land and structures	+58
Other contractual services	+246
Total	+422

Construction for Fire, Administrative and Other Purposes

Objective: Provide for the acquisition and improvement of administrative sites and replacement, construction and improvements of offices, employee housing, service and storage buildings, nurseries, airports and heliports, water, sanitation and electrical systems, and other construction projects (except recreation facilities) in support of National Forest System and State and Private Forestry activities.

Program description: The fiscal year 1984 program will emphasize replacement and rehabilitation of facilities. This emphasis is needed since nearly 50 percent of the buildings and utility systems were constructed prior to 1940. Specific areas of emphasis will be:

Health and Safety - Provide healthful and safe working and living environments for employees and users of National Forest facilities. This includes meeting drinking water and waste water disposal standards, providing facilities for proper use and storage of hazardous chemicals and flammables, replacing unsafe electrical wiring and eliminating or reducing other health and safety hazards.

Planning and Design - Provide for advanced facilities planning and preliminary designs for projects that could be expected to be constructed within the next three years. This will ensure adequate lead time for site selection, detailed design, and development of cost estimates and contract specifications to help ensure that facilities are constructed on schedule and within the cost estimates. This will reduce the need to reprogram funds among projects.

Program Support Facilities - Replace and construct facilities to furnish working and living space, and other facilities to achieve resource output and protection targets. This support includes the following program areas:

Fire Management - Provide adequate facilities for fire suppression and presuppression activities considering the long-term implications of the Forest Service Fire Management policy.

Nursery and Tree Improvement Building Construction - Construct, replace and enlarge nursery and tree improvement buildings needed to meet tree seedling production levels for the 1980's. Includes nursery and tree improvement buildings (greenhouses, headhouses, storage buildings, offices, packing sheds, etc.) and support systems which are integral parts of those buildings (sewer, electrical, and water systems, including underground irrigation systems).

Administrative Facilities - Provide service and storage facilities, offices, employee housing, and related administrative site improvements based upon carefully considered alternatives to meet program needs. Construction and replacement of housing will be limited to providing family housing in isolated locations and seasonal housing in areas where recruitment of seasonal employees is hampered by lack of or extreme cost of private housing. Family housing will not be constructed in locations where such housing can be rented or purchased by the employee in the private sector at reasonable cost. Efforts will be continued to replace older facilities where maintenance is uneconomical.

Civil Rights Support - Provide facilities which will further the civil rights goals in the Forest Service Affirmative Action Plan. Retrofit present facilities to provide separate and/or equal facilities for women and men, and access by the handicapped where appropriate.

Energy Conservation - Retrofit existing facilities to improve their energy efficiency as required by the National Energy Conservation Policy Act, P.L. 95-619. Cost effective retrofit actions are to be completed by 1990 at an estimated cost of \$8.5 million.

Of the total program, \$11,390,000 is for replacement or rehabilitation of existing facilities and \$3,455,000 is for new facilities.

Increase for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
FA&O Construction.....\$	--	14,845	+14,845
FTE	--	110	+110

The proposed projects are included in Exhibit 2. Fiscal year 1984 will emphasize public health deficiencies of seasonal crew support facilities. The lack of facilities and high cost of commercial rentals for seasonal crews are forcing use of undeveloped work camps and occupancy of substandard cabins and other facilities. To permit continued use of these facilities, at least minimum standards for potable water supply, sanitation and food service must be met.

When evaluating project priorities, projects which contribute to increased resource productivity and decreased unit costs were given high priority.

Replacement and upgrading of the Redding Emergency Service Center in California continues to be a high priority in the Fire, Administrative and Other Construction program. Phase I of the Redding project is included in the fiscal year 1983 budget. However, at the proposed funding level, other projects are of higher priority, therefore, no funding for fiscal year 1984 is requested for Phase II of this project.

Object class information:

Salaries	+2,900
Travel	+176
Transportation of things.....	+128
Supplies, materials and equipment	+730
Land and structures	+5,840
Other contractual services	+3,931
Communication, utilities and other rent	+1,140
 Total	 +14,845

Recreation Construction

Objective: To repair and rehabilitate existing recreation facilities to meet health and safety standards, protect soil and water resources, improve economic efficiency and increase fee receipts. To improve recreation experiences by providing appropriate recreational opportunities in the forest setting.

Program Description: The emphasis of the overall recreation program is away from recreation facilities toward more primitive settings. Less than one-quarter of the recreation use occurring on the National Forests is at Forest Service operated facilities. However, to meet public demand, provide for health and safety of forest visitors, maintain basic resources of soil and water quality, preserve past capital investment, convert utility systems to reduce maintenance costs, and qualify certain facilities for user fees, it is necessary to construct new facilities, or reconstruct or rehabilitate existing recreation improvements.

Of the total program \$2,067,000 is for replacement and rehabilitation of existing facilities, and \$1,125,000 is for new facilities.

Increase for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Increase</u>
Recreation Construction.....\$	--	3,192	+3,192
FTE	--	44	+44

The proposed projects are included in Exhibit 3. Construction of recreation improvements will emphasize the rehabilitation of water and sanitation systems. This program is responsive to the priorities identified in the 1980 GAO audit of National Forest recreation facilities. Outlays to bring substandard facilities up to the standards required in the Land and Water Conservation Fund Act will permit charging user fees at many of these sites.

Replacement and new construction of facilities at the Mount St. Helens National Volcanic Monument comprises 20 percent of the proposed program.

Object class information:

Salary	+900
Rents, communication and utilities	+73
Supplies, materials and equipment	+295
Lands and structures	+1,169
Other contractual services	+755
 Total	 +3,192

Road Construction

	1982 <u>Actual</u>	1983 Appropriation Enacted to Date (Dollars in thousands)	1984 Base	or 1984 Estimate	Inc. (+) Dec. (-) <u>from Base</u>
Road Construction.....\$	236,204	241,251	--	218,650	+218,650
Miles\$	10,479	9,994	--	11,063	+1,069
FTE	5,157	5,130	--	4,727	+4,727

Objective: To provide a transportation network that has the lowest overall cost of construction, operation, and maintenance that will serve the resource management objectives of the Forest Service and to develop this transportation network in an orderly manner so as to accomodate the annual resource outputs identified in the Budget.

Program Description: Several types of road programs, financed in a variety of ways, serve the resources of the National Forest: Forest Highways, Forest Road Program (FRP), Purchaser Credit Program (PCP), and Purchaser Elect Program (PEP). Each is explained in detail below.

Forest Highways: Forest Highways are public roads, maintained by State or local governments, that provide the link between the Federal Aid Highway System and the Forest Development Roads. Forest Highways serve both forest resource needs and the local communities adjacent to forest lands. These roads are financed through the Federal Highway Act from the trust fund and administered by the Federal Highway Administration (FHWA). Priorities for project selection are set by agreement among the States, Forest Service, and FHWA. The financing level has remained constant at \$33 million per year from 1960 through fiscal year 1982. The Highway Revenue Act of 1982 increased the authorization to \$50 million through 1986. These roads are traditionally 2-lane capacity facilities, built to State and Federal standards.

Forest Roads - The Forest Service transportation system consists of the following types of roads:

Forest Arterial roads provide service to large land areas and usually connect with public highways or other arterial roads to form a network of primary travel routes. Location and standards for these roads are often determined by the need for travel mobility and efficiency rather than serving a specific resource.

Forest Collector roads serve smaller land areas and are usually connected to a forest arterial or public highway. These roads collect traffic from forest local roads. Location and standards are determined by long-term resource needs and travel efficiency.

Forest Local roads connect terminal facilities with forest collector roads, forest arterial roads or public highways. Location and standards are usually determined by the specific resource needs the roads will serve.

All three types of roads may be constructed under any of the three programs discussed below, Forest Road Program, Purchaser Credit Program or Purchaser Elect Program. Usually only forest collector or forest local roads are constructed under the PCP or PEP.

Forest Road Program (FRP)

The Forest Road Program provides the financing for multipurpose road systems on or adjacent to National Forests that are designed to transport the resources of the forest. Included in the program are:

1. Construction and reconstruction of roads as needed to implement the resource development and protection programs. Emphasis is on timber access roads necessary to meet out-year targets for volume offered for sale. Included are costs of acquiring necessary rights-of-way for all types of Forest Development Roads.

2. Construction of new bridges designed as necessary portions of such roads.

3. Continued reconstruction and replacement of bridges which have been identified by inspection under the National Bridge Safety Program as not meeting the current safety requirements for highway loads.

4. Construction engineering of roads and bridges for both timber purchaser contracts and public works contracts for projects currently under construction.

5. Transportation planning, survey and design activities needed to prepare road and bridge projects that will be built through this program as well as the Timber Purchaser Programs in fiscal years 1985, 1986 and 1987. The purchaser credit program finances only construction costs. Consequently, all support costs necessary for engineering activities must come from the Forest Road Program.

6. Augmentation funds to pay for the additional costs of roads built by timber purchasers when the road standards of the project exceed those necessary for removal of timber from a specific sale. Federal law permits financing through the Purchaser Credit Program (see next section below) only for a road sufficient to meet the needs of the individual sale.

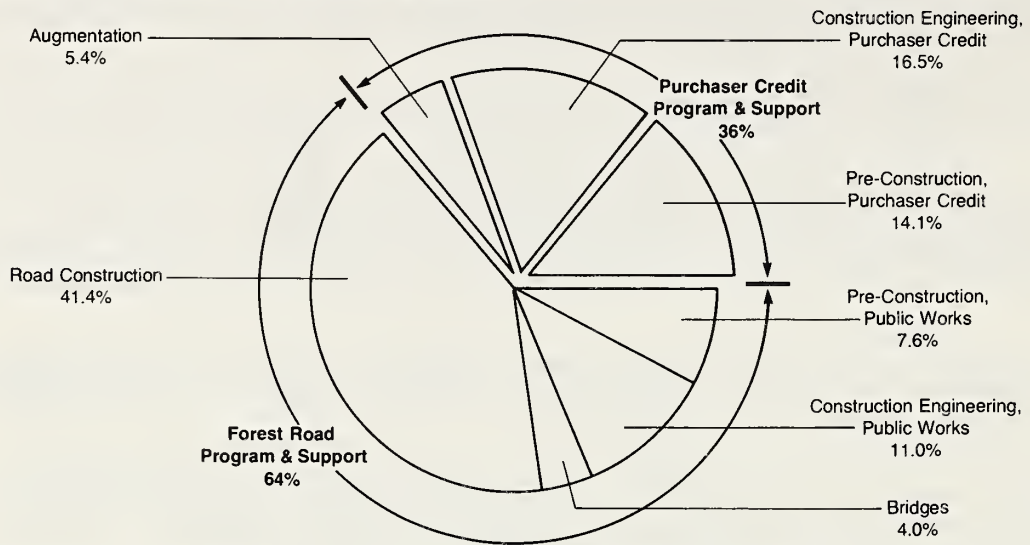
Figure 1 presents a graphic display of the percentage allocations of FRP funds among the above categories for the fiscal year 1983 program. Thirty-six percent of the funds are used to support the Purchaser Credit Program (PCP).

The funding needs of the Forest Road Program do not fluctuate in direct proportion to resource outputs for the same year. Figure 2 shows that only 11 percent of the funds in a given year are expended on projects producing outputs in the same year. Twenty-six percent is required to meet contractual obligations of prior years through contract adjustments and construction inspection, and 63 percent is spent on roads to produce outputs for future years. Roads built through the FRP must be contracted at least one year prior to offering the timber for sale.

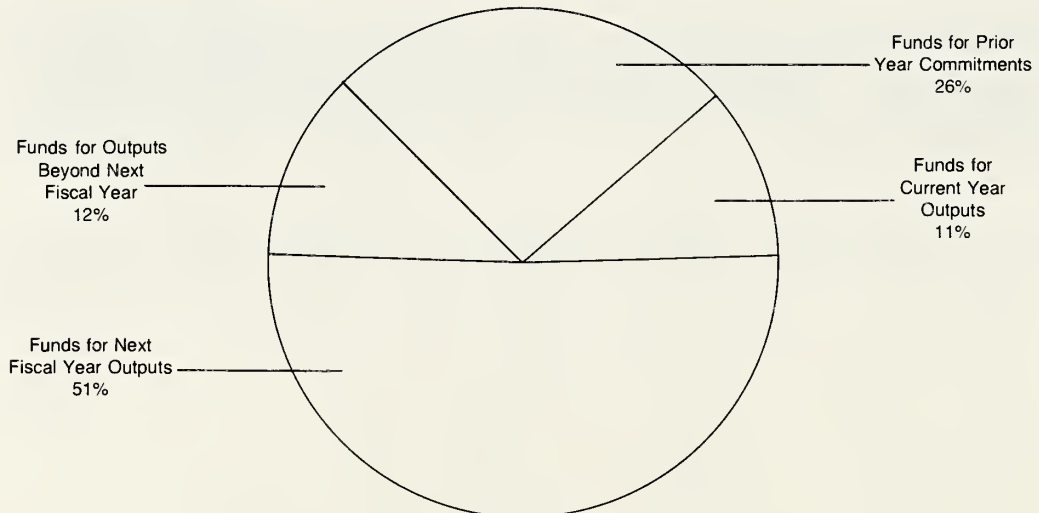
In recent years, efforts have been made to reduce the unit cost of roads. Figure 3 reflects the average cost per mile for road construction and reconstruction for the years 1980-1983. These savings have been realized through reducing the road standards, ie., in regard to width, alignment, base and surfacing.

In most cases, reductions in road standards have been made by recognizing that traffic management will be necessary to regulate potential conflicts in the use of roads. For example, recreational use of forest roads may be prohibited during peak periods of use by commercial logging trucks. This increased cost of road management is a part of the Road Operations Program, which is discussed in the Road Maintenance section.

Fiscal Year 1983 Forest Road Program Fund Breakdown



Breakdown of Fiscal Year 1983 FRP Funds by Benefiting Years



USDA/FOREST SERVICE
ROADS PROGRAM
UNIT COST DOLLARS/MILE

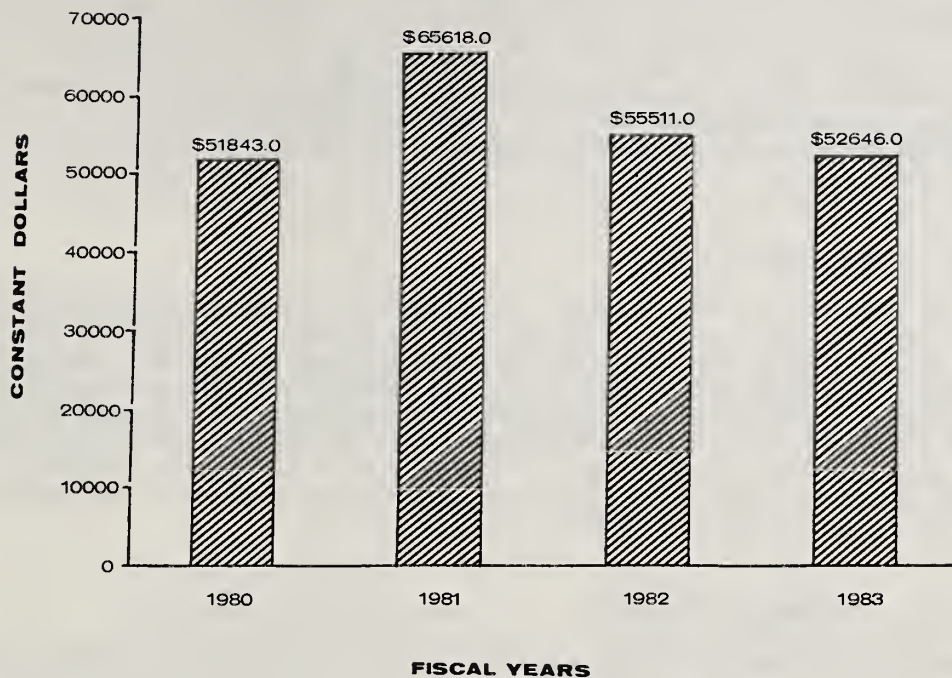


FIGURE 3

Unit cost calculated by adding dollars from Forest Road Program, Purchaser Construction Program and Purchaser Election Program together and dividing by the total mileage of the three programs.

Purchaser Credit Program (PCP)

Forest Development Roads are also constructed and reconstructed through the Purchaser Credit Program (PCP). Timber sale contracts usually require the purchaser to construct any system roads that will be necessary for the removal of the timber purchased. The purchaser deducts the costs of construction of the road from payments to the U.S. Treasury for the timber.

Construction under the PCP is accounted for outside of the Forest Service budget, but there is a ceiling amount authorized by Congress for each fiscal year. All costs in support of the Purchaser Credit Program, such as survey, design activities and construction engineering, are included in the Forest Road Program financing. Since funding for the PCP reflects only construction and reconstruction costs, it is directly related to the timber sales program for the current year.

Purchaser Elect Program (PEP)

Under the Purchaser Election Program, small business timber purchaser in all States, except Alaska, may elect at the time the contract is awarded to have the Forest Service finance and construct any roads required by the sale under the Purchaser Credit Program. Funding levels are determined by the volume of timber to be offered in the current year and the projected trend of purchasers to elect to have the Forest Service construct roads. As with the Purchaser Credit Program funds, Purchaser Election Program funds can only be used for construction and reconstruction. Support funds for survey, design, and construction engineering come from the Forest Road Program.

Relationship between PCP and FRP

Road construction needs are identified through the transportation planning process which is part of the Forest Plan. These plans specify the location of arterial and collector road and the need for local roads based on the resource activities to take place on the land. Ten-year timber harvest programs are also identified in the Forest Plan. As specific projects (such as timber sales or recreation site developments) move in time toward the year of construction, planning intensifies to describe the precise location and standards of roads needed for the project. Within the timber sale program, decisions are made 3 to 4 years in advance of the sale whether specific roads will be constructed by the timber purchasers through the Purchaser Credit Program or by public works contract in advance of sale offerings. Roads will be programmed in the Forest Road Program under any of the following conditions:

1. The standard of the road is greater than required for removal of timber from the proposed sale. Often arterial and collector roads serve multiple resources and require higher standards.
2. Total cost of a specific road is too high to be reasonably born by the timber purchaser due to its length or difficult construction conditions caused by topography, or beyond the capabilities of logging contractors of the location.
3. Timber values are low and other resources high resulting in insufficient Purchaser Credit funds within the sale. This condition occurs in some locations of the Intermountain West and Appalachia where community economic stability is dependent on local mills.

4. More than one timber sale will be hauled over a proposed road at the same time. Rather than have one operator become dependent on the other for timely completion of construction, the road is built in advance from Forest Road Program funds.

Although the majority of FRP funds are used to construct roads for the benefit of timber, some are required for other programs. Fire protection roads represented one percent in 1983. Generally, these roads are constructed on forests of high fire potential for rapid access for fire suppression. Most of the projects occur in Southern California.

Two percent of the 1983 budget was programmed for recreation roads, primarily interior campgrounds roads and short access roads to recreation sites. Six percent was budgeted for all purpose and facility access roads. These projects are built in conjunction with Fire, Administration, and Other Construction (FA&O) projects. Ninety-one percent of 1983 funds were spent on roads needed to access timber.

Road Costs per Mile

Road costs per mile vary greatly depending on many factors such as standards, amount of rock excavation, method of contracting, and topography. For general comparison purposes, the following is the range of cost per mile of the three programs utilized to finance road construction.

COST PER MILE IN 1982 DOLLARS (Net Project Costs)

Forest Road Program	42,000 - 220,000
Purchaser Credit Program	10,000 - 50,000
Purchaser Election Program	11,000 - 52,000

Forest Road Program projects are the high cost roads beyond the scope of the purchaser to construct. These are primarily arterial and collector roads and often include permanent surfacing and can be two-lanes wide. The majority of bridges are built from this fund and their costs are reflected in the cost per mile.

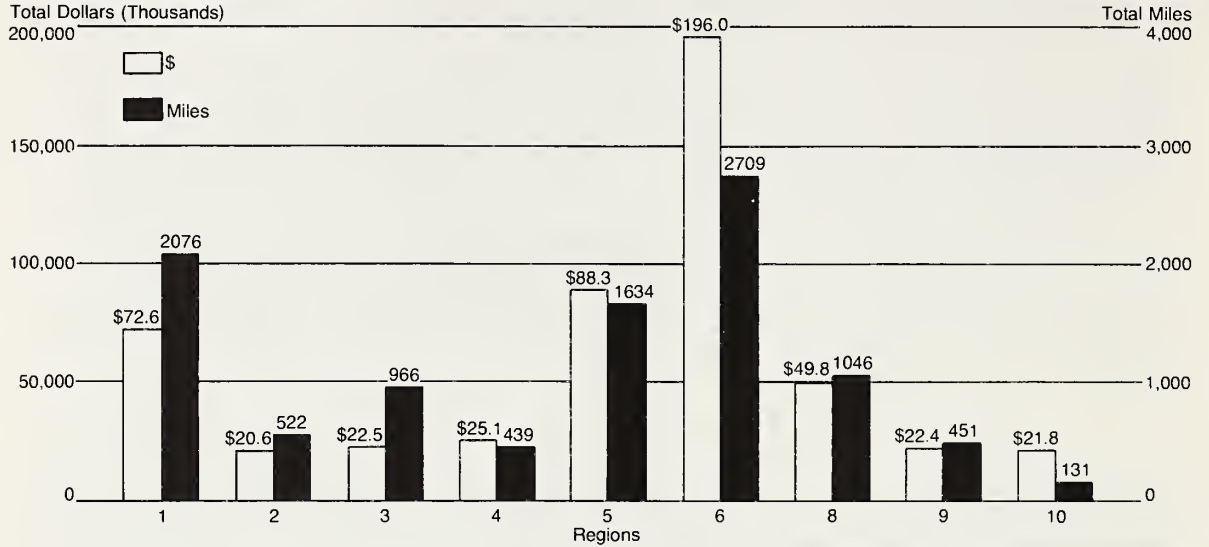
Purchaser credit roads are usually local and some collection roads. Estimates for their cost do not include a minimum wage requirement (Davis-Bacon). Surfacing varies from native material to crushed stone. Purchaser Elect costs differ from Purchaser Credit costs only through the inclusion of Davis-Bacon wage requirements.

The Regional costs and outputs for the total road construction program are shown in Figure 4. The total road funding for fiscal years 1980-1983 is shown in Figure 5.

Road Program—\$ and Miles By Region—Fiscal Year 1983

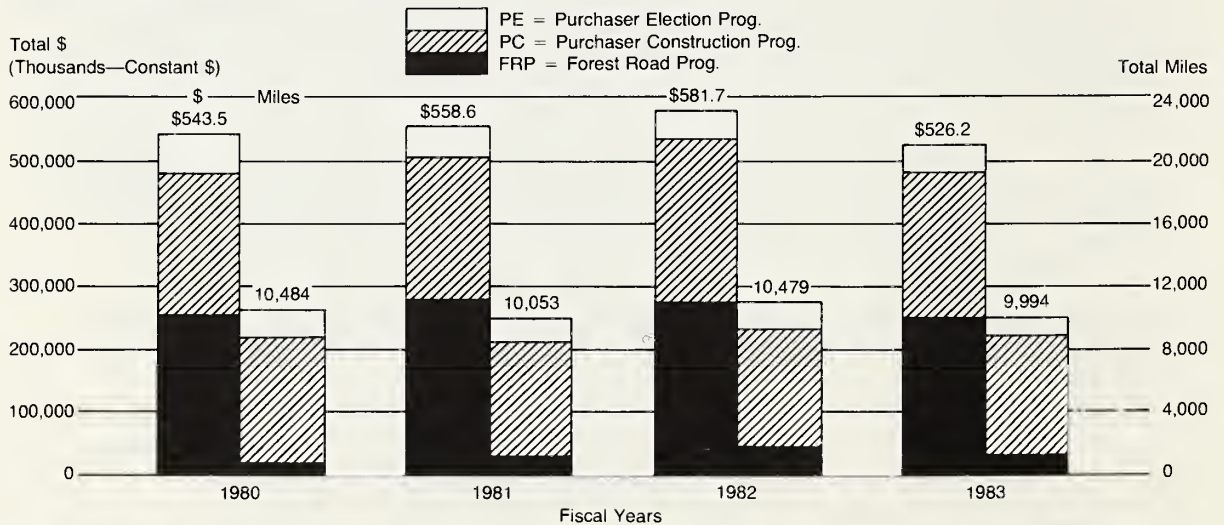
(Dollars & Miles Include FRP, PCP and PEP)

Total Dollars (Thousands)



Road Program—\$ and Miles By Fiscal Year

(Dollars and Miles Include FRP, PC and PE)



Three-year Summary of Road Construction Programs
(Dollars in thousands)

	FY 1982		FY 1983		FY 1984	
	\$	Miles	\$	Miles	\$	Miles
Forest Road Programs (FRP)	258,355	1,600	234,176	1,200	218,587	968
Purchaser Credit Program (PCP)	242,542	8,879	240,000	8,794	291,300	10,095
Purchaser Elect Program (PEP) <u>1/</u>	<u>43,820</u>	<u>--</u>	<u>44,900</u>	<u>--</u>	<u>50,475</u>	<u>--</u>
TOTAL	544,717	10,479	519,076	9,994	560,362	11,063

1/ Output miles of PEP are included in PCP.

Increase for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Increase</u>
Road Construction.....\$	---	218,650	+218,650
FTE	--	4,727	+4,727

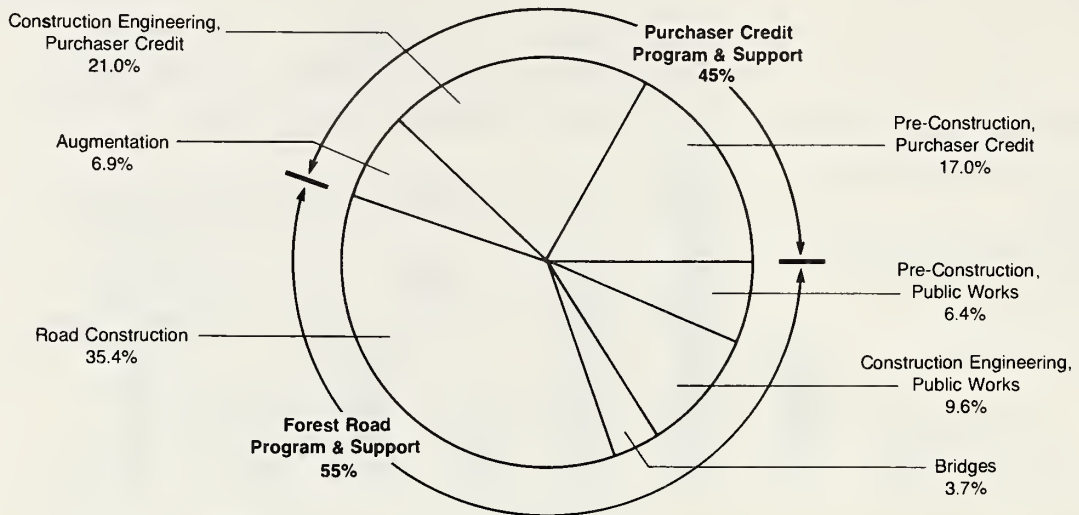
A program of \$218,650,000 in FRP funds will produce contracts for construction/reconstruction of 968 miles of road, a reduction of 232 miles from 1983. This reduction of mileage will be accomplished without a reduction in timber outputs in 1985. This will be accomplished by shifting planned sales from roadless areas to presently roaded areas where the high-cost roads are already in place and necessary road construction can be performed through the Purchaser Credit Program (PCP).

The decrease in FRP funding from 1983 will cause an increased demand for Purchaser Credit in fiscal year 1985 to construct roads that would have been built from FRP funds in 1984. The Forest Road Program will also produce contracts for the construction of 143 bridges.

Forest Road Program funds are also required to support the survey design and construction engineering needs of the Purchaser Credit Program. Fiscal year 1984 Purchaser Credit Program miles are increased by 1,301 miles from 1983. Refer to Figure 1 and Figure 6 for the internal shift within FRP to accommodate the changes of funding from fiscal year 1983 to fiscal year 1984. If this shift were to continue in future years, an overall reduction in sales offering would occur due to overcutting of timber in the roaded areas and nondevelopment of access into the released roadless areas.

The 968 miles to be constructed in fiscal year 1984 are predominately to support the timber program. A total of 938 miles are necessary to support fiscal year 1985 timber offerings. The following mileages are in support of their respective program.

Fiscal Year 1984 Forest Road Program Fund Breakdown



<u>Miles</u>	<u>Program</u>
5	Recreation
24	General Purpose

The increase of \$51,300,000 above fiscal year 1983 in Purchaser Credit authority will finance an additional 1,301 miles of roads for a total of 10,095 miles.

This increase needs stems from two sources:

1. A reduction of funds in the 1983 Forest Road Program caused 400 miles of road originally planned for construction in 1983 in timber support for 1984 sales to be dropped. This mileage must now be built in 1984 out of Purchaser Credit.

2. The sell program for 1984 is 11.6 billion board feet, up from 11.0 billion board feet in fiscal year 1983. This five percent increase will require an increase of 900 miles of Purchaser Credit construction.

Object class information:

Salary	+99,275
Travel	+4,435
Transportation of things	+6,955
Rents, communication and utilities	+8,410
Supplies and materials	+11,615
Lands and structures contracts	+54,650
Other contractual services	+33,310
Total	+218,650

Timber Purchaser Road Construction

The total Forest Service road construction program includes road construction and reconstruction through timber sale contract requirements. This construction work is performed by timber operators. Timber credits are earned by the timber operators which reduces the amount they must pay for the timber.

Trail Construction

	1982 <u>Actual</u>	1983 Appropriation Enacted to Date (Dollars in thousands)	1984 Base	1984 Estimate	Inc. (+) or Dec. (-) from Base
Trail Construction.....\$	4,038	4,864	--	5,182	+5,182
Miles.....	366	241	--	287	+287
FTE	91	110	--	115	+115

Objective: To increase the opportunities for trail related recreation and to provide access to the National Forest for administration.

Program description: National Forest System trails are vital to meet the Forest Service objectives of increasing the supply of cost-efficient recreational opportunities. Trails offer the public access to the National Forest with a minimal investment.

Much of the trail construction funds are used for manufacture and installation of trail signs; design, fabrication and erection of trail bridges; design and construction of trail-head facilities including parking lots and horse corrals. The costs of these facilities may be substantial but do not show as increases in mileage of new trail construction.

Trails built and reconstructed to accomodate handicapped users or motorized use are more costly than trails for hiking and horse use. Steep terrain requires more excavation. Highly erodible soils require special control measures and wet soils require special drainage measures or reinforcement of the trail surface. Heavy timber areas result in higher tree felling and brushing costs. Rocky sections may require drilling and blasting with explosives. Remote sections of trail construction, far from towns, require contractors to pay higher wages and the agency to pay per diem. Because of these factors, trail construction and reconstruction costs can vary from \$4,000 per mile for hiking trails in flat, open terrain with well drained soils, to over \$50,000 per mile for motorized trails through difficult terrain and soils.

Frequently, trail bridges must be built. Where natural materials are not available, such as large straight trees, it may be necessary to construct or reconstruct a prefabricated bridge. To design, manufacture and construct a major bridge in rugged terrain at a remote location can easily cost \$100,000.

Increase for 1984:

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Increase</u>
Trail Construction.....\$	--	5,182	+5,182
FTE	--	115	+115

The majority of trail construction funds will be used to reconstruct and relocate existing trails as necessary to provide for increased recreation use and prevent resource damage.

The increase of \$5,182,000 provides for priority construction and reconstruction of 287 miles. This is an increase of 46 miles over 1983 which is necessary to correct unsatisfactory trail conditions.

Object class information:

Salary	+2,352
Travel	+105
Transportation	+165
Supplies, materials and equipment	+200
Communications, utilities and other rent	+275
Land and structures	+1,295
Other contractual services	+790
Total	+5,182

EXHIBIT 1

PROJECT LISTING
Research Construction

Safety and Health --- Projects totalling \$422,000 to correct critical safety and health problems and meet Federal and local safety codes at existing research laboratories:

<u>Station</u>	<u>Project</u>	<u>Amount</u> <u>(in thousands)</u>
Pacific Northwest	Chemical storage building at Fairbanks, AK	30
Pacific Southwest	Chemical storage building at Fresno, CA	21
Intermountain	Chemical storage building at Missoula, MT, and Provo, UT	25
Rocky Mountain	Rewiring and other safety and health improvements at Rapid City, SD	7
	Rewiring, fire alarm system and other safety and health projects at Lincoln, NE	6
	Install corrosion-proof fumehoods in laboratory at Tempe, AZ	8
North Central	Replace blowers on fumehoods in laboratories Stationwide	25
Northeastern	Chemical storage buildings at Hamden, CT and Parsons, WV	25
Southern	Rewire headquarters and associated buildings at Rio Piedras, Puerto Rico	25
Southeastern	Sprinkler System - Housing Test Building at Athens, GA	5
	Chemical storage building at Macon, GA	20
FPL	Enclose fire escape in Building #1 to meet local codes	<u>225</u>
TOTAL		422

PROJECT LISTING
Construction for Fire, Administrative and Other Purposes

<u>State</u>	<u>National Forest</u>	<u>Project</u>	<u>Amount (in thousands)</u>
<u>Region 1</u>			
ID, MT	Region-wide	Planning and Design of Outyear Projects	175
ID, MT	Region-wide	Rehabilitation of Potable Water Systems	259
ID	Idaho Panhandle	Coeur d'Alene Nursery Seed Cold Storage	195
ID	Idaho Panhandle	Avery Fourplex Housing	349
ID	Nezperce	Red River Duplex Housing	229
MT	Various	Replacement of 2 Fire Lookouts	162
MT	Regional Aerial Fire Depot	Fire Equipment Warehouse Addition	192
	Region-wide	Other small projects (under \$100,000)	<u>72</u>
		Total Region 1	\$1,633
<u>Region 2</u>			
CO	Various	Rehabilitation of Potable Water Systems	136
CO	Rio Grande	Creede Barracks Water and Sewer Systems	189
NE	Nebraska	Bessey Nursery Tree Processing Building (Replacement)	475
WY	Shoshone	Replace Clarks Fork Barracks	140
WY	Bighorn	Replace Tyrrell Barracks	171
	Region-wide	Other small projects (under \$100,000)	<u>209</u>
		Total Region 2	\$1,320

<u>State</u>	<u>National Forest</u>	<u>Project</u>	<u>Amount (in thousands)</u>
<u>Region 3</u>			
AZ, NM	Region-wide	Rehabilitation of Potable Water Systems	174
AZ	Kaibab	Jacob Lake Work Center Facilities and Utilities Replacement	264
AZ	Coconino	Eldon/Flagstaff Adm. Site Planning Contract Administration, and Inspection.	100
NM	Sante Fe	Pecos Office Replacement	373
NM	Gila	Negrito Work Center Replacement	<u>309</u>
Total Region 3			\$1,220
<u>Region 4</u>			
ID, UT	Region-wide	Planning and Design of Outyear Projects	223
ID, UT	Region-wide	Electrical Wiring Rehabilitation	100
NV, UT	Region-wide	Rehabilitation of Potable Water Systems	143
ID	Payette	Krassel Water System Replacement	100
ID	Targhee	Island Park Dwelling #3 (Replacement)	70
ID	Targhee	Island Park Dwelling #4 (Replacement)	70
ID	Salmon	Cobalt Ranger District Admin. Site Replacement	618
ID	Challis	Buster Lake Dam Repair	125
ID	Payette	McCall Smokejumper Base Planning and Design	100
	Region-wide	Other small projects (under \$100,000)	<u>274</u>
Total Region 4			\$1,823
<u>Region 5</u>			
CA	Sierra	Trimmer Water System Replacement	432
CA	Klamath	Sawyers Bar Electric Power Generation/ Gas Oil Shed (Replacement)	194

<u>State</u>	<u>National Forest</u>	<u>Project</u>	<u>Amount (in thousands)</u>
CA	Sierra	North Fork Community Sewage Service Connection	324
	Region-wide	Other small projects (under \$100,000)	<u>228</u>
		Total Region 5	\$1,178
<u>Region 6</u>			
OR, WA	Region-wide	Planning and Design of Outyear Projects	167
OR	Umpqua	Steamboat Water System Replacement	350
OR	Umatilla	Tupper Water System Replacement	100
OR	Wallowa-Whitman	Administrative Sites Water and Sewer System Rehabilitation	186
OR	Deschutes	Bend Nursery Equipment Storage Bldg.	240
WA	Deschutes	China Hat Well Replacement	127
WA	Gifford Pinchot	National Volcanic Monument Flammable Storage Bldg. and Shop. (Replacement)	85
WA	Gifford Pinchot	National Volcanic Monument Office Design	100
WA	Gifford Pinchot	Wind River Nursery Operations Bldg.	410
WA	Gifford Pinchot	Wind River Water and Sewer Systems Replacement	<u>1,484</u>
		Total Region 6	\$3,249
<u>Region 8</u>			
	Region-wide	Planning and Design of Outyear Projects	102
AR	Ozark	Bayou R.D. Office Expansion	133
AR	Ouachita	Caddo Office Expansion	93
MS	DeSoto	Ashe Nursery Storage Building (Replacement)	229
MS	Tombigbee	Tombigbee Work Center Replacement	281
NC	Croatan	Croatan Work Center Replacement	224

<u>State</u>	<u>National Forest</u>	<u>Project</u>	<u>Amount (in thousands)</u>
NC	Pisgah	Air Tanker Base Relocation	141
TN	Cherokee	Ocoee Work Center & Office Replacement	596
VA	George Washington	Pedlar Work Center Replacement	520
VA	Jefferson	Glenwood R.D. Office Expansion	<u>148</u>
		Total Region 8	\$2,467
<u>Region 9</u>			
VA	Region-wide	Planning and Design of Outyear Projects	119
MI,VT	Hiawatha, Green Mountain	Storage Buildings (2) Construction	150
MN	Chippewa	Deer River Ranger Station Office and Work Facilities	528
MO	Mark Twain	Sewage System Rehabilitation	110
	Region-wide	Other small projects (under \$100,000)	<u>110</u>
		Total Region 9	\$1,017
<u>Region 10</u>			
AK	Ketchikan Area	Ketchikan Area Office	794
	Region-wide	Other small projects (under \$100,000)	<u>144</u>
		Total Region 10	\$ 938
TOTAL, FA&O CONSTRUCTION			\$14,845

PROJECT LISTING
Recreation Use Construction

<u>State</u>	<u>National Forest</u>	<u>Project</u>	<u>Amount (in thousands)</u>
<u>Region 1</u>			
MT, ID	Northern Region	Water Rehabilitation Projects	<u>83</u>
		Total, Region 1	\$ 83
<u>Region 2</u>			
SD	Black Hills	Sheridan No. Cove Group Area water and sanitation facilities	<u>155</u>
		Total, Region 2	\$ 155
<u>Region 3</u>			
NM	Carson	Valle Vidal (Vermejo Ranch)	<u>21</u>
		Total, Region 3	\$ 21
<u>Region 4</u>			
NV, UT ID,	Intermountain Region	Miscellaneous Water and Sanitation Rehabilitation Projects (including design)	564
UT	Dixie	Navajo Lake CG Rehabilitation	<u>178</u>
		Total, Region 4	\$ 742
<u>Region 6</u>			
OR	Gifford Pinchot	Mount St. Helens Projects	<u>1,279</u>
		Total, Region 6	\$ 1,279
<u>Region 8</u>			
GA	Chattahoochee	Rehabilitate Pocket Toilets	168
MI	Mississippi	Clear Springs Dam Repair	74
NC	North Carolina	Rehabilitate Water Systems at 9 Areas	80
SC	Francis Marion & Sumter	Lick Fork and Parsons Mountain Dam Repair	68
TN	Cherokee	Water and Sanitation Rehabilitation at 3 areas	<u>49</u>
		Total, Region 8	\$ 439

<u>State</u>	<u>National Forest</u>	<u>Project</u>	<u>Amount (in thousands)</u>
<u>Region 9</u>			
MO	Mark Twain	Council Bluff Sanitation	<u>313</u>
		Total, Region 9	\$ 313
<u>Region 10</u>			
AK	Chugach	Water Systems Rehabilitation	28
AK	Chugach	Kenai Peninsula Water System Improvements	61
AK	Tongass	Ohmer CG Water Supply	13
AK	Tongass	Harbor Mtn. Shelter	30
AK	Tongass	Behm Canal Cabin	<u>28</u>
		Total, Region 10	\$ 160
TOTAL, RECREATION CONSTRUCTION			\$ 3,192

CONSTRUCTION

Program and Financing (in thousands of dollars)

Identification code	12-1103-0-1-302	1982 actual	1983 est	1984 est
Program by activities:				
Direct program:				
1.	Construction of facilities.....	19,281	21,111	19,887
2.	Road and trail construction.....	292,580	271,455	218,609
3.	Pollution abatement.....	736	830	.....
4.	Land acquisition.....	120	9,000	.....
5.	Mt. St. Helens timber salvage.....	19,731	.....	.....
	Total direct program.....	332,448	302,396	238,496
Reimbursable program:				
1.	Construction of facilities.....	349	340	345
2.	Road and trail construction.....	264	258	255
3.	Pollution abatement.....	4	2	.....
	Total reimbursable program.....	617	600	600
10.00	Total obligations.....	333,065	302,996	239,096
Financing:				
Offsetting collections from:				
11.00	Federal funds.....	- 434	- 422	- 425
14.00	Non-Federal sources.....	- 183	- 178	- 175
17.00	Recovery of prior year obligations.....	- 46	.....	.....
21.40	Unobligated balance available, start of year	- 90,403	- 36,418	- 19,588
22.40	Unobligated balance transferred from other accounts.....	- 17,322	.....	.....
24.40	Unobligated balance available, end of year..	36,418	19,588	23,383
39.00	Budget authority.....	261,095	285,566	242,291
Budget authority:				
40.00	Appropriation.....	261,095	281,431	242,291
44.10	Supplemental for wage-board pay raises.....	.....	562	.....
44.20	Supplemental for civilian pay raises.....	.....	3,573	.....
Relation of obligations to outlays:				
71.00	Obligations incurred, net.....	332,448	302,396	238,496
72.40	Obligated balance, start of year.....	584,546	496,104	524,639
74.40	Obligated balance, end of year.....	- 496,104	- 524,639	- 496,707
78.00	Adjustments in unexpired accounts.....	- 46	.....	.....
90.00	Outlays, excluding pay raise supplemental.....	420,844	269,891	266,263
91.10	Outlays from wage-board pay raise supplemental.....	.....	562	.....
91.20	Outlays from civilian pay raise supplemental.....	.....	3,408	165

CONSTRUCTION

Object Classification (in thousands of dollars)

Identification code 12-1103-0-1-302		1982 actual	1983 est.	1984 est
FOREST SERVICE				
Direct obligations:				
Personnel compensation:				
11.1	Full-time permanent	79,997	97,550	65,619
11.3	Other than full-time permanent	22,499	17,679	21,622
11.5	Other personnel compensation	1,712	1,730	1,645
11.8	Special personal services payments	41	40	39
11.9	Total personnel compensation	104,249	116,999	88,925
12.1	Personnel benefits: Civilian	12,031	11,189	10,571
13.0	Benefits for former personnel	3,473	3,518	3,338
21.0	Travel and transportation of persons	3,181	4,022	3,057
22.0	Transportation of things	1,695	1,717	1,629
23.1	Standard level user charges	803	813	772
23.2	Communications, utilities, and other rent	4,960	5,024	4,767
24.0	Printing and reproduction	941	953	904
25.0	Other services	61,691	56,303	49,287
26.0	Supplies and materials	7,020	7,110	6,746
31.0	Equipment	2,829	2,865	2,719
32.0	Lands and structures	112,703	84,706	61,039
33.0	Investments and loans	-5,822	1,000	1,100
41.0	Grants, subsidies, and contributions	1	1	1
42.0	Insurance claims and indemnities	363	368	349
44.0	Refunds	304	308	292
99.0	Subtotal, direct obligations	310,422	296,896	235,496
Reimbursable obligations:				
Personnel compensation:				
11.1	Full-time permanent	159	138	150
11.3	Other than full-time permanent	148	129	120
11.5	Other personnel compensation	1	1	
11.9	Total personnel compensation	308	268	270
12.1	Personnel benefits: Civilian	31	27	27
21.0	Travel and transportation of persons	7	6	6
22.0	Transportation of things	9	8	8
23.2	Communications, utilities, and other rent	34	30	30
25.0	Other services	38	33	34
26.0	Supplies and materials	95	116	113
31.0	Equipment	16	14	14
32.0	Lands and structures	79	98	98
99.0	Subtotal, reimbursable obligations	617	600	600

CONSTRUCTION

ALLOCATION TO FEDERAL HIGHWAY ADMINISTRATION

Personnel compensation:				
11.1	Full-time permanent.....	785	240	315
11.3	Other than full-time permanent.....	183	65	64
11.5	Other personnel compensation.....	71	23	27
11.9	Total personnel compensation.....	1,039	328	406
12.1	Personnel benefits: Civilian.....	108	34	42
21.0	Travel and transportation of persons.....	365	147	143
22.0	Transportation of things.....	158	149	147
23.2	Communication, utilities, and other rent.....	42	32	30
24.0	Printing and reproduction.....	3	3	3
25.0	Other services.....	2,031	1,652	625
26.0	Supplies and materials.....	19	17	17
31.0	Equipment.....	1	2	2
32.0	Lands and structures.....	18,260	3,136	1,585
99.0	Subtotal obligations, Federal highway administration.....	22,026	5,500	3,000
99.9	Total obligations.....	333,065	302,996	239,096

Personnel Summary

FOREST SERVICE

Direct:			
Total number of full-time permanent positions	3,664	4,296	2,783
Total compensable workyears:			
Full-time equivalent employment	5,327	5,473	4,989
Full-time equivalent of overtime and holiday hours	74	72	70
Average ES salary	\$58,500	\$61,122	\$61,122
Average GS grade	10.10	10.10	10.10
Average GS salary	\$21,825	\$22,700	\$23,610
Average salary of ungraded positions	\$22,200	\$23,090	\$24,010
Reimbursable:			
Total number of full-time permanent positions	7	6	6
Total compensable workyears full-time equivalent employment	12	11	11
Average ES salary	\$58,500	\$61,122	\$61,122
Average GS grade	11.10	11.10	11.10
Average GS salary	\$23,013	\$23,930	\$24,890
Average salary of ungraded positions	\$25,440	\$26,460	\$27,520

ALLOCATION ACCOUNTS

	Total number of full-time permanent positions.....	31	10	13
	Total compensable workyears:			
	Full-time equivalent employment.....	48	15	18
	Full-time equivalent of overtime and holiday hours.....	3	1	1
	Average GS grade.....	10.90	10.90	10.90
	Average GS salary.....	\$23,800	\$24,500	\$25,200

LAND ACQUISITION

	1982 <u>Actual</u>	1983 Appropriation <u>Enacted to Date</u>	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
	(Dollars in thousands)				
Land and Water Conservation Fund	\$ 26,262	56,877	---	10,070	+10,070
Acres acquired	8,332	42,850	---	---	---
Weeks Act	---	---	---	---	---
Total	\$ 26,262	56,877	---	10,070	+10,070
FTE	85	83	---	66	+66

Appropriation Summary Statement

The Weeks Act of 3/1/11 provides for the acquisition of land to protect watersheds of navigable streams and for timber production. The Land and Water Conservation Fund Act of 9/3/64 (78 Stat. 897, as amended; 16 U.S.C. 460 -4 to 460 -11 provides funding for the acquisition of recreation lands and interests. The acquisitions are made under authorities of various acts and provide for high priority outdoor recreation opportunities within the National Forest System.

Authorities:

P.L. 61-435, Weeks Act, March 1, 1911: as amended by P.L. 94-588, (16 U.S.C. 516, 521b)

Section 1 and 2

Land acquisition for watershed protection and timber production
(05-96) 12-1103 302 SAGR HAGR

P.L. 68-575; The Act of March 3, 1925 as amended (16 U.S.C. 555)

Section 5

Purchase of land, acceptance donation of land.

Such sums as are necessary not to exceed \$50,000 per fiscal year.
No expiration date.

P.L. 75-210; Title III, The Bankhead-Jones Farm Tenant Act as amended
July 22, 1937 (7 U.S. C. 1010, 1011).

Sections 31 and 32

Land acquisition, exchange and authority to correct maladjustments
for Land Utilization purposes.

Such sums as are necessary. No expiration date.

P.L. 84-479; The Act of August 3, 1956 (7 U.S.C. 428a)

Section 11

Land or interests in land by purchase, exchange or otherwise.

P.L. 93-205, Endangered Species Act, December 28, 1973
Sections 2 and 3
Protection of threatened and endangered species.

P.L. 88-577, Wilderness Act, September 3, 1964
Section 5 and 6
Land acquisition, exchange, donation.

Such sums as appropriated by Congress. No expiration date.

P.L. 93-622, Eastern Wilderness Act, January 3, 1975
Section 6 and 9
Land acquisition, exchange, donation.

Such sums as appropriated by Congress. No expiration date.

P.L. 90-542, Wild and Scenic Rivers Act, October 2, 1968
Section 6 and 16
Land acquisition, exchange, donation.

Such sums as appropriated by Congress. No expiration date.

P.L. 90-543, National Trails System Act, October 2, 1968
Section 7 and 10
Land acquisition, exchange, donation.

Such sums as appropriated by Congress. No expiration date.

P.L. 95-495 Boundary Waters Canoe Area Wilderness and Mining Protection Area Act,
October 21, 1978
Section 5d, 6(d) (e), 11(e) (f), and 18(e)

Such sums as are necessary. No expiration date specified.

P.L. 96-586, Lake Tahoe Basin Act, December 23, 1980
Section 2 and 3
Land acquisition

Such sums as are appropriated. No expiration date.

P.L. 94-579 Federal Land Policy and Management Act, October 21, 1976;
Sections 205 and 206 Act, (43 U.S.C. 1715 and 1716)
Land exchange, acquisition and cash equalization.

Such sums as are appropriated. No expiration date.

Objective: Provides for acquisition of lands, waters and interests therein needed for protection of watersheds of navigable streams and for timber production and for high priority outdoor recreation opportunities and for protection and management of wildlife habitat, especially in critical habitat for threatened and endangered species. It also provides for cash equalization for land exchanges.

Land and Water Conservation Fund

Objective: Lands, waters and interests therein are acquired within the National Forest System, for recreation, wilderness, wildlife habitat management areas, endangered species, and other areas important for public outdoor recreation purposes.

Program description: The proposed \$10,070,000 program will provide funding to, complete purchases already started, continue the shut down of existing project locations and meet the most critical court deficiency awards. Land exchanges will be heavily used to acquire priority lands so cash equalization funds will be needed to balance values.

Increase for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Land and Water Conservation Fund\$	---	10,070	+10,070
FTE	---	66	+66

The recommended level of funding for the L&WCF program in fiscal year 1984 will provide for the basic needs for the closing of existing cases and payment of court actions still pending. There will not be any new cases planned for purchase with these funds.

The acquisition of lands will be deferred to future years when more favorable economic conditions will allow for high acquisitions. Over the past ten years, more than 647,000 acres have been acquired at a cost of \$337.7 million, or on a average of \$522 per acre.

Since the beginning of the program in 1965, nearly 1.1 million acres of land needed for outdoor recreation within the National Forest System have been acquired for approximately \$582 million or about \$549 per acre.

Object class information:

Salaries	+1,750
Travel	+70
Supplies, material and equipment	+30
Other contractual services	+500
Land and structures	+7,680
Total	+10,070

Weeks Act

Objective: Provide for the acquisition of lands and interests, including water rights, that may be considered other than real property within the National Forest to protect watersheds or navigable streams and for timber production. Further, to maximize benefits and cost reductions by improving access to existing system lands, reducing property lines, avoidance of title claims, and reductions in special land use permits to serve inholding. For this and other acquisition authorities, cash equalization payments shall be paid from benefiting funds.

Program description: Lands are acquired from willing sellers with primary emphasis on the 50 National Forests east of the 100th Meridian. Per acre costs are relatively low as the lands are generally unimproved, remote, and are frequently in abused condition due to mining, excessive timber cutting, grazing, and burning.

Tracts planned for the Weeks Act program generally do not possess the primary recreation attributes required for Land and Water Conservation Fund Act (L&WCF) purchases. However, in certain situations, Weeks funds can be coupled with L&WCF to acquire an entire tract by voluntary purchase rather than as partial taking by condemnation as would occur if only L&WCF were available. Weeks Act funds are also the only source of funding to acquire interests in upstream lands for erosion control necessary to enhance fisheries and stream improvements undertaken with the States under the Sikes Act.

The Weeks Act program was responsible for the acquisition of most of the National Forest lands in the eastern United States. Per acre costs are relatively low because the lands are generally unimproved, isolated tracts. Acquisition costs are often less than the cost of surveying the adjacent National Forest property line and the cost to provide road and utility rights-of-way to isolated privately owned tracts.

The Weeks program reduces the need to acquire road rights-of-way and to issue special use permits and can reduce local government costs by precluding permanent residential development in isolated areas.

In fiscal year 1981, 8,041 acres were acquired at a cost of \$2.5 million. This resulted in a benefit of over \$750,000 in land line location, rights-of-way, special use permits and trespass reduction, and timber values in addition to land purchase costs. Over the past 10 years, nearly 114,000 acres have been acquired at a cost of \$17.4 million or an average of \$153 per acre. Since the origination of the program in 1911, 20.1 million acres have been acquired at a cost of \$128.5 million, or an average of \$6.39 per acre.

There was no Weeks Act program in fiscal year 1982 or fiscal year 1983 due to increased emphasis on efficient management of lands already in Federal ownership.

No change for 1984.

There are no Weeks Act land acquisition funds requested in 1984. We will hold in abeyance the acquisition of lands for the protection of watersheds of navigable streams and for timber production until such time as the economy improves and consideration can be given to funding this program.

LAND ACQUISITION

Program and Financing (in thousands of dollars)

Identification code	12-5004-0-2-303	1982 actual	1983 est	1984 est
Program by activities:				
10.00	Total obligations	13,897	54,667	20,106
Financing:				
21.40	Unobligated balanced available, start of year		-12,365	-14,575
24.40	Unobligated balanced available, end of year	12,365	14,575	4,539
40.00	Budget authority (appropriation) ..	26,262	56,877	10,070
Relation of obligations to outlays:				
71.00	Obligations incurred, net	13,897	54,667	20,106
72.40	Obligated balance, start of year		2,991	1,316
74.40	Obligated balance, end of year	-2,991	-1,316	-11,842
90.00	Outlays	10,906	56,342	9,580

Object Classification (in thousands of dollars)

Identification code	12-5004-0-2-303	1982 actual	1983 est	1984 est
Personnel compensation:				
11.1	Full-time permanent	2,036	404	1,710
11.3	Other than full-time permanent	136	105	135
11.5	Other personnel compensation	19	4	5
11.9	Total personnel compensation	2,191	513	1,850
12.1	Personnel benefits: Civilian	231	113	227
21.0	Travel and transportation of persons	87	42	86
22.0	Transportation of things	9	4	9
23.1	Standard level user charges	47	23	46
23.2	Communications, utilities, and other rent	105	110	103
24.0	Printing and reproduction	6	3	6
25.0	Other services	454	685	446
26.0	Supplies and materials	31	60	30
31.0	Equipment	23	30	23
32.0	Lands and structures	10,712	53,084	17,280
42.0	Insurance claims and indemnities	1		
99.9	Total obligations	13,897	54,667	20,106

Personnel Summary

Total number full-time permanent positions	73	14	57
Total compensable workyears:			
Full-time equivalent employment	83	83	66
Full-time equivalent of overtime and holiday hours	1		
Average ES salary	\$58,500	\$61,122	\$61,122
Average GS grade	11.60	11.60	11.60
Average GS salary	\$27,738	\$28,850	\$30,000
Average salary of ungraded positions	\$23,430	\$24,360	\$25,335

ACQUISITION OF LANDS FOR NATIONAL FORESTS, SPECIAL ACTS

		1983				Inc. (+)
		Appropriation				or
	1982	Enacted	1984	1984	1984	Dec. (-)
	<u>Actual</u>	<u>to Date</u>	<u>RPA</u>	<u>Base</u>	<u>Estimate</u>	<u>from Base</u>
		(Dollars in thousands)				
Acquisition of lands						
for National Forests,						
special acts	\$ 724	753	780	753	780	+27
Acres acquired	548	700	--		700	700
FTE	2	2	--	2	2	--

Appropriation Summary Statement

The Congress has enacted several special laws which authorize appropriation from the receipts of specified National Forests for the purchase of lands to minimize erosion and flood damage.

These are critical watershed lands needing soil stabilization and vegetative cover restoration to prevent serious erosion and damaging floods within these National Forests. Land treatment measures must be applied and subsequently maintained on all lands in these areas to make corrective action fully effective. To assure full program effectiveness, the intermingled private lands are acquired by the Federal Government. Results are reflected in improved watershed conditions.

The counties in Utah, Nevada and southern California have recognized the benefits that these acquisition programs have produced. They are very interested in having these critical lands protected through public ownership. At present, damages to the lands are occurring which can only result in future expenditures of public funds for rehabilitation and public safety at costs greatly exceeding current land acquisition costs.

Authorities:

Public Laws 75-505, 74-367, 75-748, 78-591, and 75-634: (58 Stat. 227 and 54 Stat. 299).

Acquisition of lands for control of soil erosion and flood damage originating within the boundaries of National Forests.

(05-96) 12-5208 302 SENP RIIA

Toiyabe - \$10,000 annually

Others - Such sums as appropriated out of receipts by Congress, no expiration date specified.

Objective: To purchase lands within critical watersheds that need soil stabilization and restoration of vegetation to prevent serious erosion and resultant damaging floods. Funds may also be used for cash equalization in land exchanges involving acquisition of these lands.

Program description: Lands are acquired on a willing-seller basis. After acquisition, the lands are managed to stabilize the soils and restore vegetative cover to prevent serious erosion and damaging floods. In the last three years, 4,653 acres were acquired at a cost of \$1,318,068.

	<u>1982 Actual</u>	<u>1983 Estimate</u>	<u>1984 Estimate</u>
1. Cache, National Forest, Utah, Act of 5/11/38, as amended	\$ 20,000	20,000	20,000
2. Uinta-Wasatch National Forests, Utah, Act of 8/26/35, as amended	\$ 28,000	30,000	30,000
3. Toiyabe National Forest, Nevada, Act of 6/25/38, as amended.....	\$ 10,000	10,000	10,000
4. Angeles National Forest, California, Act of 6/11/40	\$ 334,000	343,000	260,000
5. Cleveland National Forest, Cali- fornia, Act of 6/11/40	\$ 166,000	175,000	160,000
6. San Bernardino and Cleveland National Forests, California, Act of 6/15/38	\$ 166,000	175,000	300,000
Total	\$ 724,000	753,000	780,000

Increase in 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Acquisition of Lands for National Forest, Special Acts.....\$	753	780	+27
FTE	2	2	—

An increase of \$27,000 will result in the acquisition of approximately 700 acres of land. This land is within critical watersheds that need soil stabilization and restoration of vegetation to prevent serious erosion and resultant damaging floods. The reduction in future damages from floods exceeds the land acquisition and treatment costs.

The planned accomplishment is approximately 152 acres more than the fiscal year 1982 level of 548 acres.

Object class information:

Land and structures	+27
Total	+27

ACQUISITION OF LANDS TO COMPLETE LAND EXCHANGES

	1982	1983	1984	1984	Inc. (+) or Dec. (-)
	<u>Actual</u>	<u>Appropriation Enacted to Date</u>	<u>Base</u>	<u>Estimate</u>	<u>from Base</u>
			(Dollars in thousands)		
Acquisition of land to complete land exchange	\$ 151	147	147	20	-127
Acres acquired	471	500	--	30	30
FTE	--	--	--	--	--

Appropriation Summary Statement

The Act of December 4, 1967 (16 U.S.C. 484a), as amended stipulates that deposits made by public school districts, public school authorities or State or local governments, to provide for cash equalization of certain land exchanges can be appropriated to acquire lands suitable for National Forest System purposes in the same State as the National Forest System (NFS) lands conveyed in the exchanges.

Authority:

P.L. 90-171, Act of December 4, 1967 as amended (Land Exchanges in the National Forest): (16 U.S.C. 484a)

Acquisition of lands to complete land exchange with public schools.
(06-96) 12-5216 302 SAGR HARG

Such sums as may be appropriated by Congress, no expiration date specified.

Objective: To acquire lands suitable for National Forest System purposes to replace NFS lands acquired by public school districts, public school authorities, or State or local governments.

Program description: When it is in the public interest, public schools, State or local governments can acquire NFS lands by paying cash which is deposited into a special Treasury fund. Upon appropriation, these funds may be used within the same State to acquire replacement lands suitable for NFS purposes. The money has been specifically deposited for acquisition of replacement lands. In the last three years, 840 acres were acquired at a cost of \$285,000.

Decrease in 1984:

	1984	1984	
	<u>Base</u>	<u>Estimate</u>	<u>Decrease</u>
Acquisition of Lands to Complete Land Exchanges.....\$	147	20	-127
FTE	--	--	--

The estimated decrease of \$127,000 in 1984 is the result of less money expected for exchanges with schools, State and local governments. This program is cyclical and the availability of funds is dependent upon deposits into the fund by individual school districts or State or local governments at the time they acquire a tract of National Forest System land for public purposes.

Object class information:

Land and structures	-127
---------------------------	------

RANGE BETTERMENT FUND

	1982 <u>Actual</u>	1983 Appropriation Enacted <u>to Date</u>	1984 <u>RPA</u>	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Range Betterment						
Fund	6,583	5,800	5,200	5,800	5,200	-600
FTE	156	130	--	130	118	-12

Appropriation Summary Statement

A range betterment program on National Forests within the 16 western States is financed by appropriations from grazing fee receipts.

Authorities:

P.L. 95-579, Federal Land Policy and Management Act of 1976: (43 U.S.C. 1751) as amended by

P.L. 95-514, Public Rangeland Improvement Act of 1978, October 28, 1978: (43 U.S.C. 1901-1908)

Range Management use of one-half of grazing receipts from 16 western States.
(05-96) 12-5207 302 SAGR HAGR

Such sums as are appropriated from receipts by Congress, no expiration date specified.

Objectives:

1. Arrest range deterioration and improve range forage conditions with resulting benefits to livestock production, watershed protection and wildlife.
2. Make cost-effective investments in range improvements on areas of highest priority on National Forests in the 16 western States.
3. To the extent feasible, rehabilitate, protect and improve soil and vegetation cover on National Forests in order to demonstrate sound improvement practices on associated private and other State and Federal lands.

Program Description: Range Betterment Funds are used for range rehabilitation, protection, and improvements. One-half of the funds are to be used on the National Forest from which the funds originated, and the remaining one-half for range betterment within the Region of origin.

Range betterment activities involve the installation of both structural and nonstructural range improvements including, but not limited to, seeding and reseedling, fence construction, weed control, water development, and fish and wildlife habitat enhancement.

Planning and administrative funds necessary to carry out the intent of the legislation are included under the Range Management section in the National Forest System section of these notes. Outputs and accomplishments are, therefore, a combination of both appropriations and are shown as a combined total under Range Management.

Decrease in 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Decrease</u>
Range Betterment Fund.....\$	5,800	5,200	-600
FTE	130	118	-12

The decrease of \$600,000 reflects a reduction in fiscal year 1983 revenues from grazing fees derived from National Forests in the 16 western States.

Object class information:

Salary and benefits	-230
Travel	-6
Transportation of things	-35
Other services	-113
Supplies, materials and equipment	-183
Land and structures	-33
Total	-600

WORKING CAPITAL FUND

Appropriation Summary Statement

The Working Capital Fund was established by the Act of August 3, 1956, as amended by the Act of October 23, 1962 (16 U.S.C. 579b). It is a self-sustaining revolving fund which provides services to National Forests, Experiment Stations, and other Federal agencies when necessary; and as provided by law, to State and private agencies and persons who cooperate with the Forest Service in fire control and other authorized programs.

Authorities: Department of Agriculture Organic Act of 1956. (70 Stat. 1034; 16 U.S.C. 579b)

Revolving fund.

Program description: The forestry-related supply and support services provided by the Working Capital Fund in fiscal year 1981 included the following:

1. Equipment - a service which owns, operates, maintains, replaces, and repairs common-use motor driven and similar equipment. This equipment is rented to administrative units, at rates which recover the cost of operation, repair, maintenance, management, and depreciation. The rates also include an increment which provides additional cash which, when added to depreciation earnings and the residual value of equipment, provides sufficient funds to replace the equipment.

2. Aircraft - a service which operates, maintains, and repairs Forest Service owned aircraft used in fire surveillance and suppression and in other Forest Service programs. The aircraft are rented at rates which recover the cost of depreciation, operation, maintenance, repair, and improvements in the airworthiness of the aircraft. Aircraft replacement costs are financed from appropriated funds, the Forest Service Working Capital Fund, or a combination of both.

3. Supply - a service which provides for the following common services:

a. Photo reproduction laboratories which store, reproduce and supply photographs of National Forest lands and activities at cost.

b. Sign shops which manufacture and supply special signs for the National Forests for use in regulating traffic and as information to the public and other users of the National Forests.

c. Subsistence which prepares and serves meals for Forest Service crews working in areas where adequate public restaurant facilities are not available.

4. Nurseries - operate forest tree nurseries and cold storage facilities for storage of tree and seed stock and a seed extractory. Tree seed is procured, cleaned, bagged, and stored in refrigerated facilities, then sold to National Forests at cost.

Volume of Business for the Various Major Activities of Working Capital Fund
(Dollars in thousands)

	1982 <u>Actual</u>	1983 <u>Estimate</u>	1984 <u>Base</u>	1984 <u>Estimate</u>
Equipment	\$ 90,200	87,004	91,621	91,621
Aircraft	\$ 3,221	2,898	3,045	3,045
Supply	\$ 1,380	1,439	1,401	1,401
Nursery	\$ <u>20,242</u>	<u>16,807</u>	<u>18,306</u>	<u>18,306</u>
Total	\$ 115,043	108,148	114,373	114,373

The Working Capital Fund requires no cash appropriation. Initially, its assets were purchased by regular Forest Service appropriations and were donated to the fund.

The increases over 1983 are due to pay act costs and increased costs of equipment purchases.

YOUTH CONSERVATION CORPS

	1982 <u>Actual</u>	1983 Appropriation Enacted to Date	1984 <u>Base</u>	1984 <u>Estimate</u>	(Inc. (+) or Dec. (-) <u>from Base</u>
			(Dollars in thousands)		
Youth Conservation Corps	\$ --	10,000	--	--	-10,000
FTE	--	--	--	--	--

General: For budgetary purposes, the entire appropriation is shown under the Forest Service. Of the \$10 million appropriated, \$3.4 million is designated for the "National Forest System", \$3.3 million for the "Operation of the National Park System", National Park Service, and \$3.3 million to "Resource Managmeent", United States Fish and Wildlife Service.

Objective: To provide gainful summer employment for young men and women aged 15 thru 18 in conservation work and offer a broad variety of educational experiences to them as they learn ways to improve the quality and productivity of land, air, and water.

Program description: The Act of August 13, 1970 (84 Stat. 794) (16 U.S.C. 1701-06), as amended, authorizes the Youth Conservation Corps (YCC) Program on Federal lands.

The primary purposes of the program are to:

- (1) Accomplish needed conservation works on public lands.
- (2) Provide gainful employment for 15-18 year-old males and females from all segments of society.
- (3) Develop an understanding and appreciation in participating youths of the Nation's natural environment and heritage.

During 1982, the Forest Service operated a \$1,600,000 YCC program with National Forest System funds (as authorized by the 1982 Appropriation Act) serving 1006 young people. For 1983, about 2,150 young people are expected to participate in a \$3,400,000 program. See the Human Resource Program section of this justification material for additional information on accomplishments for this and other employment programs.

Decrease for 1984:

		<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Decrease</u>
Youth Conservation				
Corps	\$	10,000	—	-10,000
	FTE	30	—	-30

No funding is requested for this program in 1984. YCC is a low priority program because the program is not targeted for the economically disadvantaged, the group most in need of assistance.

Gifts, Donations, and Bequests
for Forest and Rangeland Research

Appropriation Summary Statement

Gifts and Bequests are received for research as authorized by P.L. 95-307 (16 U.S.C. 164b). Amounts received but not needed for current operations shall be invested in public debt securities. This appropriation language would make available to the Forest Service all such deposits to invest and reinvest in public debt securities.

Authority:

P.L. 95-307, Forest and Rangeland Renewable Resources Research Act of 1978:
(16 U.S.C. 1643)
Section 4 (b)

Acceptance of gifts and proceeds thereof not needed for current operations to be invested in public debt securities.

Such sums as appropriated by Congress shall remain available until expended.

Program Description: Funds are used to present the annual Heritage Workshop which is designed to acquaint academic instructors with the latest technology relating to wood utilization and engineering. Balances not needed for current operations shall be invested in interest bearing securities.

No funding change is proposed.

ACQUISITION OF LANDS FOR NATIONAL FORESTS,
SPECIAL ACTS

Program and Financing (in thousands of dollars)

Identification code	12-5208-0-2-302	1982 actual	1983 est	1984 est
Program by activities:				
1.	Cache National Forest, Utah		20	20
2.	Uinta and Wasatch National Forests, Utah	29	30	30
3.	Toiyabe National Forest, Nev	10	10	10
4.	San Bernardino and Cleveland National Forests, Calif	351	362	310
5.	Angeles National Forest, Calif	25	275	235
6.	Cleveland National Forest, Calif		56	175
10.00	Total obligations	415	753	780
Financing:				
25.00	Unobligated balance lapsing	309		
40.00	Budget authority (appropriation) (special fund)	724	753	780
Relation of obligations to outlays.				
71.00	Obligations incurred, net	415	753	780
72.40	Obligated balance, start of year	344	137	137
74.40	Obligated balance, end of year	- 137	- 137	- 137
90.00	Outlays	622	753	780

Object Classification (in thousands of dollars)

Identification code	12-5208-0-2-302	1982 actual	1983 est	1984 est
Personnel compensation:				
11.1	Full-time permanent	46	24	100
11.3	Other than full-time permanent	4	2	16
11.9	Total personnel compensation	50	26	116
12.1	Personnel benefits: Civilian	5	6	6
21.0	Travel and transportation of persons	1	2	2
22.0	Transportation of things	1	2	2
25.0	Other contractual services	15	28	57
32.0	Lands and structures	343	689	597
99.9	Total obligations	415	753	780

Personnel Summary

Total number of permanent positions	2	2	4
Total compensable workyears: Full-time equivalent employment	2	2	5
Average GS grade	9.60	9.60	9.60
Average GS salary	\$23,000	\$23,920	\$24,900

ACQUISITION OF LANDS TO
COMPLETE LAND EXCHANGES

Program and Financing (in thousands of dollars)

Identification code	12-5216-0-2-302	1982 actual	1983 est	1984 est
Program by activities:				
Acquisition of land:				
	Alabama.....		20	
	Arizona.....		69	
	California.....	14	31	
	Georgia.....		7	
	Michigan.....	15	37	
	Mississippi.....	42	50	
	New Mexico.....		20	
	North Carolina.....			20
	Oklahoma.....	24	15	
10.00	Total obligations (object class 32.0)	95	249	20
Financing:				
21.40	Unobligated balance available, start of year	785	841	739
24.40	Unobligated balance available, end of year	841	739	739
40.00	Budget authority (appropriation) (indefinite, special fund)	151	147	20
Relation of obligations to outlays:				
71.00	Obligations incurred, net.....	95	249	20
72.40	Obligated balance, start of year.....	92	97	199
74.40	Obligated balance, end of year.....	-97	-199	-199
90.00	Outlays.....	90	147	20

RANGE BETTERMENT FUND

Program and Financing (in thousands of dollars)

Identification code	12-5207-0-2-302	1982 actual	1983 est	1984 est
Program by activities:				
10.00	Total obligations.....	7,471	5,966	5,208
Financing:				
21.40	Unobligated balance available, start of year	1,253	365	199
24.40	Unobligated balance available, end of year	365	199	191
40.00	Budget authority (appropriation) (indefinite, special fund).....	6,583	5,800	5,200
Relation of obligations to outlays:				
71.00	Obligations incurred, net.....	7,471	5,966	5,208
72.40	Obligated balance, start of year.....	1,782	1,855	2,021
74.40	Obligated balance, end of year.....	-1,855	-2,021	-2,029
90.00	Outlays.....	7,398	5,800	5,200

Object Classification (in thousands of dollars)

Identification code	12-5207-0-2-302	1982 actual	1983 est	1984 est
Personnel compensation:				
11.1	Full-time permanent.....	890	788	628
11.3	Other than full-time permanent	1,313	512	942
11.5	Other personnel compensation	104	92	74
11.9	Total personnel compensation.....	2,307	1,392	1,644
12.1	Personnel benefits: Civilian.....	224	135	158
13.0	Benefits for former personnel.....	145	128	102
21.0	Travel and transportation of persons	60	53	42
22.0	Transportation of things.....	89	79	63
23.2	Communications, utilities, and other rent	39	35	28
24.0	Printing and reproduction.....	7	6	5
25.0	Other services.....	2,048	1,877	1,609
26.0	Supplies and materials.....	2,161	1,914	1,281
32.0	Lands and structures.....	387	343	273
42.0	Insurance claims and indemnities.....	4	4	3
99.9	Total obligations.....	7,471	5,966	5,208

Personnel Summary

Total number of full-time permanent positions	47	40	30
Total compensable workyears:			
Full-time equivalent employment	151	130	115
Full-time equivalent of overtime and holiday hours	5	5	4
Average ES salary	\$58,500	\$61,122	\$61,122
Average GS grade	8.30	8.30	8.30
Average GS salary.....	\$18,945	\$19,700	\$20,490
Average salary of ungraded positions.....	\$22,739	\$23,650	\$24,595

WORKING CAPITAL FUND

Program and Financing (in thousands of dollars)

Identification code 12-4605-0-4-302		1982 actual	1983 est	1984 est
Program by activities:				
Direct program:				
Forestry related supply and support:				
	Operating costs, funded	81,337	76,317	84,241
	Capital investment, funded	29,667	19,723	20,194
10.00	Total obligations	111,004	96,040	104,435
Financing:				
Offsetting collections from:				
Federal funds:				
11.00	Revenue	-98,938	-81,608	-86,283
11.00	Income provision for increased cost of equipment replacement	-14,955	-12,336	-13,043
14.00	Non-Federal sources: Proceeds from sale of equipment and other assets	-1,150	-949	-1,003
21.98	Unobligated balance available, start of year: Fund balance	-19,612	-23,651	-22,504
24.98	Unobligated balance available, end of year: Fund balance	23,651	22,504	18,398
39.00	Budget authority			
Relation of obligations to outlays				
71.00	Obligations incurred, net	-4,038	1,147	4,106
72.98	Obligated balance, start of year: Fund bal- ance	18,530	3,487	4,634
74.98	Obligated balance, end of year: Fund bal- ance	-3,487	-4,634	-8,740
90.00	Outlays	11,005		

WORKING CAPITAL FUND

Object Classification (in thousands of dollars)

Identification code	12-4605-0-4-302	1982 actual	1983 est	1984 est
	Personnel compensation:			
11.1	Full-time permanent.....	16,151	13,943	15,139
11.3	Other than full-time permanent.....	8,047	6,947	7,543
11.5	Other personnel compensation.....	512	442	480
11.9	Total personnel compensation.....	24,710	21,332	23,162
12.1	Personnel benefits: Civilian.....	2,622	2,264	2,458
13.0	Benefits for former personnel.....	119	103	112
21.0	Travel and transportation of persons.....	478	413	448
22.0	Transportation of things.....	407	351	382
23.1	Standard level user charges.....	331	286	310
23.2	Communications, utilities, and other rent....	1,521	1,313	1,426
24.0	Printing and reproduction.....	47	41	44
25.0	Other services.....	31,143	26,886	29,193
26.0	Supplies and materials.....	28,370	24,292	26,593
31.0	Equipment.....	21,334	18,617	19,998
32.0	Lands and structures.....	- 104	110	274
41.0	Grants, subsidies and contributions.....	14	12	13
42.0	Insurance claims and indemnities.....	23	20	22
44.0	Refunds.....	- 11		
99.9	Total obligations.....	111,004	96,040	104,435

Personnel Summary

Total number of full-time permanent positions.....	689	(¹)	(¹)
Total compensable workyears:			
Full-time equivalent employment.....	1,200	(¹)	(¹)
Full-time equivalent of overtime and holiday hours.....	19	(¹)	(¹)
Average ES salary.....	\$58,500	\$61,122	\$61,122
Average GS grade.....	9.60	9.60	9.60
Average GS salary.....	\$23,600	\$24,500	\$25,500
Average salary of ungraded positions.....	\$23,156	\$24,080	\$25,045

¹Personnel totals are included with personnel totals of all other Forest Service programs

YOUTH CONSERVATION CORPS

Program and Financing (in thousands of dollars)

Identification code 12-1125-0-1-302		1982 actual	1983 est	1984 est
Program by activities:				
10.00	Total obligations (object class 25.0)	- 169	.....	.....
Financing:				
14.00	Offsetting collections from Non-Federal sources	- 3	.....	.....
23.40	Unobligated balance transferred to other accounts	147	.....	.....
25.00	Unobligated balance lapsing	25	.....	.....
39.00	Budget authority .....	.....	.....	.....
Budget authority:				
40.00	Appropriation .....	.....	10,000	.....
41.00	Transferred to other accounts .....	.....	10,000	.....
43.00	Appropriation (adjusted) .....	.....	.....	.....
Relation of obligations to outlays:				
71.00	Obligations incurred, net	- 172	.....	.....
72.40	Obligated balance, start of year	461	13	.....
74.40	Obligated balance, end of year	- 13	.....	.....
90.00	Outlays	276	13	.....

OTHER GENERAL APPROPRIATIONS
Program and Financing (in thousands of dollars)

Identification code 12-9911-0-1-302		1982 actual	1983 est	1984 est
Program by activities:				
	1. Acquisition of lands for Uinta National Forest, Utah.....		67	
	2. Acquisition of lands for Wasatch National Forest, Utah.....		212	
10.00	Total obligations (object class 32.0)		279	
Financing:				
21.40	Unobligated balance available, start of year	- 280	- 279	
23.40	Unobligated balance transferred to other accounts	1		
24.40	Unobligated balance available, end of year..	279		
39.00	Budget authority			
Relation of obligations to outlays:				
71.00	Obligations incurred, net		279	
90.00	Outlays		279	
Distribution of outlays by account:				
Acquisition of lands for:				
	Uinta National Forest		67	
	Wasatch National Forest		212	

HIGHLAND SCENIC HIGHWAY

Program and Financing (in thousands of dollars)

Identification code	12-8029-0-7-401	1982 actual	1983 est	1984 est
Program by activities:				
10.00	Total obligations	49	11	.....
Financing:				
21.40	Unobligated balance available, start of year	-710	-11	.....
23.40	Unobligated balance transferred to other accounts	650	.....	.....
24.40	Unobligated balance, available, end of year	11	.....	.....
39.00	Budget authority .....	.....	.....	.....
Relation of obligations to outlays:				
71.00	Obligations incurred, net	49	11	.....
72.40	Obligated balance, start of year	71	84	.....
74.40	Obligated balance, end of year	-84	.....	.....
90.00	Outlays	36	95	.....

Object Classification (in thousands of dollars)

Identification code	12-8029-0-7-401	1982 actual	1983 est	1984 est
11.1	Personnel compensation: Full-time permanent	38	.....	.....
12.1	Personnel benefits: Civilian	4	.....	.....
21.0	Travel and transportation of persons	1	.....	.....
23.1	Standard level user charges	1	.....	.....
23.2	Communications, utilities, and other rent	2	.....	.....
25.0	Other services	22	11	.....
32.0	Lands and structures	-19	.....	.....
99.9	Total obligations	49	11	.....

Personnel Summary

Total number of full-time permanent positions	1	.....	.....
Total compensable workyears: Full-time equivalent employment	1	.....	.....
Average GS grade	12.40	.....	.....
Average GS salary	\$31,217	.....	.....

PERMANENT APPROPRIATIONS-WORKING FUNDS

	1982	1983	1984	1984	1984	Inc. (+) or Dec. (-) from Base
	Actual	Appropriation Enacted to Date	RPA	Base	Estimate	
			(Dollar in thousands)			
Brush Disposal:						
receipts	\$ 29,588	35,700	---	---	46,550	---
program level	\$ 38,822	50,700	59,640	52,379	48,300	-4,079
FTE	1,021	1,234	---	1,234	1,178	-56
Licensee Programs:						
Smokey Bear/Woodsy Owl						
receipts	\$ 54	200	---	---	100	---
program level	\$ 80	200	100	200	100	-100
FTE	1	1	---	1	1	---
Restoration of Forest Lands & Improvements:						
receipts	\$ 56	100	---	---	100	---
program level	\$ 64	100	100	100	100	---
FTE	1	1	---	1	1	---
Roads & Trails for States, National Forest Funds:						
receipts	\$ (60,942)	(29,399)	---	---	(90,300)	---
Timber Purchaser Roads Constructed by the Forest Service:						
receipts	\$ 40,200	44,900	---	---	50,475	+5,575
program level	\$ 41,000	44,900	52,080	44,900	50,475	+5,575
FTE	7	8	---	8	10	+2
Timber Salvage Sales:						
receipts	\$ 6,822	7,900	---	---	12,775	---
program level	\$ 10,996	7,900	15,320	8,184	12,775	+4,591
FTE	351	387	---	387	410	+23
Tongass Timber Supply Fund:						
receipt	\$ 45,300	45,960	---	---	47,250	-616
program level	\$ 45,895	45,960	74,350	47,866	47,250	-616
FTE	879	840	---	840	840	---
TOTAL:						
receipts	\$ 122,020	134,760	---	---	157,250	---
program level	\$ 136,857	149,760	201,590	153,629	159,000	+5,371
FTE	2,260	2,471	---	2,471	2,440	-31

NOTE: Difference in dollars between receipts and program levels are due to carryover balances being available for expenditure.

Appropriation Summary Statement

To provide for those permanent appropriations which are separate Forest Service activities or which are combined with other Forest Service activities to accomplish common tasks.

Authorities:

P.L. 84-190, Act of August 11, 1916 (Department of Agriculture Appropriations Act), as amended: (16 U.S.C. 490)

Section 6

Disposal of brush and other debris due to timber sales in National Forests
(05-96) 12-9922 302 SAGR HAGR

Permanent appropriation, no expiration date specified.

P.L. 82-327, Act of May 23, 1952, as amended, (16 U.S.C. 5800-2)

Section 3

Forest fire prevention campaign (Smokey Bear)
(05-96) 12-9922 302 SAGR HAGR

Permanent appropriation, no expiration date specified.

P.L. 93-318, Act of June 22, 1974, as amended, (16 U.S.C. 5800-3)

Sections 1-6

Woodsy owl anti-pollution campaign
(05-96) 12-9922 302 SAGR HAGR

Permanent appropriation, no expiration date specified.

P.L. 85-464, Act of June 20, 1958: (16 U.S.C. 579c)

Section 7

Restoration, improvements and protection of Forest Service lands
(05-96) 12-9922 302 SAGR HAGR

Permanent appropriation, no expiration date specified.

P.L. 62-430, Act of March 4, 1913: (16 U.S.C. 501) (Dept. of Agriculture Appropriation Act)

Forest road and trail improvements--10 percent financed from National Forest receipts
(05-96) 12-9922 302 SAGR HAGR

Permanent appropriation, no expiration date specified.

P.L. 94-588, National Forest Management Act of 1976, Oct 22, 1976:
(16 U.S.C. 472a(i))

Section 14(i)

Timber purchaser roads constructed by the Forest Service
(05-96) 12-9922 302 SAGR HAGR

Permanent appropriation, no expiration date specified.

P.L. 94-588, National Forest Management Act of 1976, Oct. 22, 1976:

(16 U.S.C. 472a(h)).

Section 14(h)

Timber salvage fund for harvesting insect-infested, dead and damaged trees

(05-96) 12-9922 302 SAGR HAGR

Permanent appropriation, no expiration date specified.

P.L. 96-487, Alaska National Interest Lands Conservation Act, December 2, 1980:
(16 U.S.C. 539d).

Section 705a

Tongass timber supply fund to maintain timber at specified level on
Tongass National Forest

(05-96) 12-9922 302 SAGR HAGR

Permanent appropriation, no expiration date specified.

Brush Disposal

Objective: To protect the natural resources of the National Forests for public use by reducing logging slash from timber sale areas.

Program description: As part of a timber sale, collections may be required from the timber purchaser for the Forest Service to complete brush disposal tasks to reduce fire hazards, prepare the site for forest regeneration and allow for recreational user access.

Timber cutting usually increases the fire hazard because of dry fuel increase in the form of logging slash. This slash may also:

1. Impair reforestation.
2. Contribute to the buildup of insect populations.
3. Cause damage to stream channels.
4. Degrade esthetics of the forest environment.

When disposal of brush and other debris is necessary, National Forest timber sale contracts require treatment or deposit of funds for treatment of debris resulting from timber sale operations. When economical and expedient, the work is performed by the timber purchaser. When not done by the purchaser, it is done by the Federal Government, using deposits to cover costs of the work as authorized under Section 6 of the Act of April 24, 1950 (16 U.S.C. 490).

The effect of timber cutting and the manner of treating slash varies widely among geographic regions. Brush disposal may be accomplished in several ways such as crushing, chipping or burning. Combinations of these are often used.

<u>Accomplishments:</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
thousand acres	538	550	660

<u>Decrease for 1984:</u>	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Brush Disposal.....\$	52,379	48,300	-4,079
FTE	1,234	1,178	-56

The \$48,300,000 is the funding level needed to treat the timber sale areas where harvesting has been completed and where the fuel created by the sales are ready for disposal. The decrease of \$4,079,000 is a direct link to the reduced amount of timber harvest activities for the past two years. The unit cost of brush disposal work is expected to decrease from \$92 per acre in fiscal year 1983 to \$73 per acre in fiscal year 1984. This decrease is partly due to the use of heli-torch and partly to the increased use of fuelwood cutting prior to treatment. This has reduced the amounts of fuels to be treated and greatly increased the number of acres that can be treated at one time.

Object class information:

Salary	-890
Travel	-110
Transportation of things	-592
Supplies, materials and equipment	-950
Other contractual services	-1,537
Total	-4,079

Licensee Program-Smokey Bear and Woodsy Owl

Program description: Fees for the use of characters by private enterprises are collected under regulations formulated by the Secretary and are available as follows:

1. Smokey Bear--for furthering the nationwide forest fire prevention campaign (16 U.S.C. 5800-2).
2. Woodsy Owl--for promoting wise use of the environment and programs which foster maintenance and improvement of environmental quality (16 U.S.C. 5800-3).

<u>Decrease for 1984:</u>	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Decrease</u>
Licensee Program.....\$	200	100	-100
FTE	1	1	---

This decrease of \$100,000 reflects the decline in receipts for this account over the past seven years--from \$230,000 in 1976 to \$54,000 in 1982. We expect receipts to increase to \$100,000 in 1983 and 1984.

Object class information:

Supplies, materials and equipment	-5
Other contractual services	-95
Total	-100

Restoration of Forest Lands and Improvements

Program description: Recoveries from cash bonds or forfeitures under surety bonds by permittees or timber purchasers, who fail to complete performance or improvement, protection, or rehabilitation work required under the permit or timber sale contract, are used to cover the cost to the United States of completing such work on Forest Service System lands. Funds received as settlement of a claim are used for improvement, protection or rehabilitation made necessary by the action which led to the cash settlement. (Act of June 20, 1958, 16 U.S.C. 579c).

No change proposed. This level reflects a continuation of the current program level.

Road and Trail for States, National Forests Fund

Since 1982 the permanent appropriation of 10 percent of National Forest receipts pursuant to the Act of March 4, 1913 (16 U.S.C. 501) has been transferred to the General Fund to offset appropriations. The amounts shown in the table are actual for 1982 and 1983 and estimated (based on 1983 receipts) for 1984.

Timber Purchaser Roads Constructed by the Forest Service (PEP)

Objective: Construct, through a process of competition bidding, timber sale roads for small business purchasers who elect to have the roads constructed by the Forest Service.

Program Description: This program, referred to as the Purchaser Elect Program (PEP), is a part of the financing which makes up the total Forest Service annual road program. In order for a road to qualify, construction costs exceeding \$20,000 must be included in the timber sale contract and the purchaser must be classified as a small business operator. The PEP program is available to all locations in the National Forest System except the State of Alaska. Authority cited at 16 USC 472a(i) makes funds available from timber receipts.

Outputs (miles) associated with PEP are an unknown until after sale award. All road construction mileage outputs associated with timber sale contracts are included in the Timber Purchaser Road Construction Program.

Costs differ between Purchaser Credit and Purchaser Elect funds only by the increase caused by including Davis-Bacon Wage rate requirements in Purchaser Elect funds.

<u>Increase for 1984:</u>	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Timber purchaser roads constructed by the Forest Service\$	44,900	50,475	+5,575
FTE	8	10	+2

The increase of \$5,575,000 is based on experience gained in the past 4 years. The Forest Service has no control on demand of these funds since contractually small business purchasers can elect to require the Forest Service to construct qualifying roads.

Object class information:

Salary	+40
Travel	+2
Lands and structures	+5,143
Other contractual services	+390
Total	+5,575

Timber Salvage Sales

Objective: To salvage insect-infested, dead, damaged or down timber, and to remove associated trees for stand improvement.

Program description: A component of the timber sales program is the salvage of insect-infested, dead, damaged or down timber. A separate permanent appropriation for timber salvage was established for this program as a result of the National Forest Management Act of 1976, 16 U.S.C. 472a(h). A portion of the receipts from timber salvage sales are deposited in this account and are used to prepare and administer future salvage sales. Separate appropriations of \$3,000,000 each in fiscal years 1977 and 1979 have been used as "seed money" to accelerate the establishment of timber salvage sales as a self-sustaining permanent appropriation. A portion of the sales prepared with these funds is set aside for preferential award to small business firms with 25 or fewer employees.

	FY 1981 <u>Actual</u>	FY 1982 <u>Actual</u>	FY 1983 <u>Estimate</u>	FY 1984 <u>Estimate</u>
	(Billion Board Feet)			
Salvage volume from sale administration and management	0.5	.8	1.0	1.1
Timber salvage sale fund volume	<u>0.8</u>	<u>.8</u>	<u>.3</u>	<u>.5</u>
Total salvage volume	1.3	1.6	1.3	1.6

	1984 <u>Base</u>	1984 <u>Estimate</u>	<u>Increase</u>
<u>Increase for 1984:</u>			
Timber Salvage Sales ..\$	8,184	12,775	+4,591
FTE	387	410	+23

The \$12,775,000 will provide the funds necessary to examine, prepare, and offer 522 million board feet of salvageable material in fiscal year 1984. It will also provide for the full administration of salvage sales made in previous years. The increase of \$4,591,000 provides for the advanced sale preparation, support and timber sale transportation system development and maintenance work necessary to prepare the additional 192 million board feet of salvageable material over the 330 million board feet prepared in fiscal year 1983.

Object class information:

Salary.....	+400
Travel	+285
Transportation of things	+1,303
Supplies, materials and equipment	+955
Communications, utilities and other rents	+429
Other contractual services	+1,319
Total	+4,591

Tongass Timber Supply Fund

Objective: To maintain the timber supply from the Tongass National Forest at a rate of 4.5 billion board feet per decade as provide by 16 U.S.C. 539d.

Program description: Funds will provide for timber sale preparation and administration including protective measures for wildlife, fisheries, and soil and water resources. The level of timber management planning, silvicultural examination and investments in timber stand improvements, reforestation, roads, facilities, and research are commensurate with sustaining timber supply at 4.5 billion board feet per decade.

The 1984 funding level will support a timber sale offering of 477 million board feet. Facility construction includes planning and design for the Tongass units (\$767,000); Phase IV construction at Thorne Bay (\$1,743,000); Petersburg Marine Facilities (\$763,000); Juneau Ranger District Work Center (\$72,000); two floatcamps (Wanigans) (\$193,000) and the Hoonah Ranger District Work Center (\$125,000) for a total of \$3,663,000. This is a decrease of \$1,216,000 from F.Y. 1983.

Road construction and reconstruction totals \$15,033,000 and includes 41 miles of advanced roading for access to special marginal and technologically marginal stands. Multiple-use coordination and support costs are reduced by \$73,000 for additional wildlife and fisheries, recreation, and landline location activities because of the reduced level of timber sale preparation work.

The \$26,000 decrease in forestry research will continue to provide the essential information on attainable growth rates, yield predictions, and the applicability of partial cutting and other harvesting practices on sensitive areas without adverse impacts on other resources. There will be no additional programs initiated in fiscal year 1984.

The \$662,000 for the F.Y. 1984 level in Reforestation will accomplish the 1,007 acres. The increase of \$327,000 in Timber Stand Improvement will accomplish an additional 2,350 acres of release and weeding.

Funding for this special account is derived from receipts collected by the Secretary of Agriculture and the Secretary of the Interior.

The 1984 program is \$47,250,000. This level reflects a continuation of the current program level.

Tongass Timber Supply Fund
Three - year display
(Dollars in thousands)

		<u>1982</u>	<u>1983</u>	<u>1984</u>
Timber Sales				
Preparation <u>1/</u>	\$	7,776	7,410	7,509
MMBF		475	484	477
Timber Sales				
Administration	\$	2,586	2,870	2,987
Timber Support	\$	1,899	2,270	1,997
Reforestation	\$	762	1,625	662
Acres		1,000	1,382	1,007
Timber Stand				
Improvement	\$	3,232	2,883	2,940
Acres		6,300	8,650	7,700
Facilities				
Construction	\$	7,344	4,879	3,663
Road Construction	\$	8,585	11,952	15,033
Miles		54	30	41
Engineering				
Support	\$	12,310	10,371	10,785
Research	\$	1,401	1,700	1,674
TOTAL, Tongass Timber Supply Fund	\$	45,895	45,960	47,250
Purchaser				
Construction <u>2/</u>	\$	(20,800)	(22,881)	(52,770)
Miles		153	160	219
Ref/TSI (KV) <u>3/</u>	\$	784	665	413
Acres		1010/Ref. Acres	700/Ref. Acres	978/Ref. Acres
GRAND TOTAL	\$	46,679	46,625	47,663

1/ Includes Timber Management Planning and Silvicultural Examinations.

2/ Timber purchaser road construction is an off-budget line item and is not reflected in totals. Parenthesized figures indicate dollar limitations set for purchaser construction, which are reflected in the construction appropriation limitation

3/ Not included in the Tongass Timber Supply Fund appropriation but under K-V Funds.

PERMANENT APPROPRIATIONS-PAYMENT FUNDS

	<u>1982 Actual</u>	<u>1983 Estimate</u>	<u>1984 Estimate</u>	Inc. (+) or Dec. (-) <u>from 1983</u>
Payment to Minnesota	711	711	711	---
Payments to Counties, National Grasslands	12,116	11,350	12,135	+785
Payments to School Funds Arizona	121	16	121	+105
Payments to States, National Forests Fund	<u>230,486</u>	<u>132,601</u>	<u>255,979</u>	<u>+123,378</u>
Total Payments	243,434	144,678	268,946	+124,268

Authorities:

P.L. 71-539, Shipstead-Nolan Act of July 10, 1930, as amended by P.L. 95-495:
(16 U.S.C. 577G)

Section 5

Payment to Minnesota for land purchase in Superior National Forest
(05-96) 12-9921 852 SAGR HAGR

Such sums from National Forests Fund equal to three-fourths of 1 percent of the fair appraised value of the lands, no expiration date specified.

P.L. 75-210, Bankhead-Jones Farm Tenant Act, July 22, 1937,
as amended: (7 U.S.C. 1012)

Sections 33

Payments to counties where National Grasslands are located
(05-96) 12-9921 852 SAGR HAGR

Such sums from receipts equal to 25 percent of net revenues, no expiration date specified.

P.L. 61-219, Act of June 20, 1910 (36 Stat. 573).

Section 24

Payments to school funds: Arizona
(05-96) 12-9921 652 SAGR HAGR SENR HIIA

Such sums from National Forests Fund equal to the percent of school land acreage as compared to National Forest acreage applied to the gross receipts collected in the State. No expiration date specified.

P.L. 60-136, Act of May 23, 1908 (Department of Agriculture Appropriation Act), as amended: (16 U.S.C. 500)

Payments to States, National Forests Fund.
(05-96) 12-9921 852 SENR HAGR SAGR HIIA

25 percent of monies received, no expiration date specified.

Payment to Minnesota

Objective: Provide a special annual payment to the State of Minnesota for lands in the Boundary Waters Canoe Area as specified by law.

Program description: At the close of each fiscal year the State of Minnesota is paid 75 percent of 1 percent of the appraised value of certain Superior National Forest lands in the counties of Cook, Lake and St. Louis for distribution to these counties (16 U.S.C. 577g).

Payments to Counties, National Grasslands

Objective: Provide an annual payment to the counties in which the National Grasslands and Land Utilization prospects are located for the funding of schools and roads.

Program description: Of the revenues received for the use of National Grasslands, 25 percent is paid to the counties in which such land is situated for school and road purposes (7 U.S.C. 1012).

Payments to School Funds, Arizona

Objective: Provide an additional payment to the State of Arizona over and above that received from the National Forest Twenty-Five Percent Fund, for the funding of schools for the loss in income from lands due, but not yet selected, as authorized under the Act of June 20, 1910.

Program description: The State of Arizona is paid an additional share of National Forest receipts to be used for school purposes (36 Stat. 562).

Payments to States, National Forest Funds

Objective: Provide an annual payment to the States from National Forest receipts to be used for school and road purposes.

Program description: With few exceptions, 25 percent of all money received from the National Forests during any fiscal year is paid to the States in which the forests are located, for the benefit of public schools and public roads of the county or counties in which such National Forests are situated (16 U.S.C. 500).

The National Forest Management Act of 1976 (P.L. 94-588, October 22, 1976), has expanded the term "monies received" to include all collections from sale area improvement activities plus "all amounts earned or allowed any purchaser of National Forest timber and other forest products within such State... for construction of roads." The amount of this appropriation varies each year in direct proportion to National Forest receipts, sale area improvement collections and timber purchaser construction during the previous fiscal year.

The Act was further amended by the Wood Residue Utilization Act of 1980 (Public Law 96-554) which expanded the term "monies received" to include any wood residue credit applied under the Act as well as from sales of wood residues, less the sum of any residue credit applied, plus any costs incurred by the Forest Service in processing and storing such residues.

FOREST SERVICE PERMANENT APPROPRIATIONS

Program and Financing (in thousands of dollars)

Identification code	12-9922-0-2-302	1982 actual	1983 est	1984 est
Program by activities:				
Direct program:				
1.	Expenses, brush disposal	38,822	51,829	47,951
2.	Licensee programs, Forest Service ..	79	87	69
3.	Restoration of forest lands and im- provements	64	49	32
4.	Timber purchaser roads constructed by Forest Service	40,999	44,900	53,780
5.	Timber salvage sales	10,996	8,448	12,268
6.	Tongass timber supply fund	45,895	45,960	54,600
	Total direct program	136,855	151,273	168,700
	Reimbursable program: Other	13	10	10
10.00	Total obligations	136,868	151,283	168,710
Financing:				
14.00	Offsetting collections from non-Federal sources	- 13	- 10	- 10
21.40	Unobligated balance available, start of year	- 71,355	- 56,520	- 55,007
24.40	Unobligated balance available, end of year..	56,520	55,007	45,307
60.00	Budget authority (appropriation) (permanent, indefinite, special funds)	122,020	149,760	159,000
Relation of obligations to outlays:				
71.00	Obligations incurred, net	136,855	151,273	168,700
72.40	Obligated balance, start of year	64,076	52,460	62,701
74.40	Obligated balance, end of year	- 52,460	- 62,701	- 76,803
90.00	Outlays	148,471	141,032	154,598

FOREST SERVICE PERMANENT APPROPRIATIONS

Object Classification (in thousands of dollars)

Identification code	12-9922-0-2-302	1982 actual	1983 est	1984 est
Direct obligations:				
Personnel compensation:				
11.1	Full-time permanent.....	24,909	41,412	39,218
11.3	Other than full-time permanent	13,105	6,868	14,298
11.5	Other personnel compensation	2,848	2,832	3,511
11.8	Special personal service payments.....	9	9	11
11.9	Total personnel compensation.....	40,871	51,121	57,038
12.1	Personnel benefits: Civilian.....	8,145	8,099	10,040
13.0	Benefits for former personnel.....	1,468	1,460	1,810
21.0	Travel and transportation of persons.....	3,154	3,136	3,888
22.0	Transportation of things.....	1,047	1,041	1,291
23.1	Standard level user charges.....	1,389	1,381	1,712
23.2	Communications, utilities, and other rent	3,255	3,237	4,012
24.0	Printing and reproduction.....	246	245	303
25.0	Other services.....	38,018	42,509	40,206
26.0	Supplies and materials.....	2,997	2,980	3,694
31.0	Equipment.....	1,568	1,559	1,933
32.0	Lands and structures.....	34,635	34,439	42,692
41.0	Grants, subsidies, and contributions.....	— 2	2	2
42.0	Insurance claims and indemnities.....	64	64	79
99.0	Subtotal, direct obligations	136,855	151,273	168,700
25.0	Reimbursable obligations: Other contractual services	13	10	10
99.9	Total obligations.....	136,868	151,283	168,710

Personnel Summary

Total number of full-time permanent positions	1,155	1,855	1,689
Total compensable workyears:			
Full-time equivalent employment	2,194	2,471	2,440
Full-time equivalent of overtime and holiday hours	148	127	151
Average ES salary.....	\$58,500	\$61,122	\$61,122
Average GS grade.....	10.10	10.10	10.10
Average GS salary.....	\$21,467	\$22,325	\$23,220
Average salary of ungraded positions	\$25,072	\$26,075	\$27,120

FOREST SERVICE PERMANENT APPROPRIATIONS

Program and Financing (in thousands of dollars)

Identification code 12-9921-0-2-852		1982 actual	1983 est	1984 est
Program by activities:				
	1. Payment to Minnesota.....	711	711	711
	2. Payments to counties, National Grass-lands.....	12,116	11,350	12,135
	3. Payments to school funds, Arizona.....	121	16	121
	4. Payments to States, National Forests fund.....	230,486	-132,601	255,979
10.00	Total obligations (object class 41.0)	243,434	144,678	268,946
Financing:				
60.00	Budget authority (appropriation) (permanant, indefinite, special fund).....	243,434	144,678	268,946
Relation of obligations to outlays				
71.00	Obligations incurred, net.....	243,434	144,678	268,946
90.00	Outlays.....	243,434	144,678	268,946

TRUST FUNDS

	1982 <u>Actual</u>	1983 Appropriation Enacted <u>to Date</u>	1984 <u>RPA</u>	1984 <u>Base</u>	1984 <u>Estimate</u>	Inc. (+) or Dec. (-) <u>from Base</u>
Cooperative Work						
Knutson-Vandenberg						
(KV):						
Reforestation \$	62,890	81,000	108,500	82,780	84,350	+1,570
thousand acres ...	161	214	245	214	215	+1
FTE	1,290	1,435	--	1,435	1,435	---
Timber Stand						
Improvement	\$ 14,900	24,900	36,340	25,450	26,850	+1,400
thousand acres ...	121	142	162	142	142	--
FTE	305	435	--	435	435	--
Other	\$ 6,218	10,700	12,000	10,925	6,800	-4,125
FTE	129	180	--	180	180	--
Program subtotal.. \$	84,008	116,600	156,840	119,155	118,000	-1,155
Receipts subtotal. \$	77,546	89,700	--	--	101,867	--
FTE	1,724	2,050	--	2,050	2,050	--
Cooperative Work-Other:						
program level \$	27,896	30,000	42,200	31,200	32,000	+800
receipts	\$ 26,254	30,000	--	--	31,000	--
FTE	776	743	--	743	743	--
Total, Cooperative Work:						
program level \$	111,904	146,600	199,040	150,355	150,000	-355
receipts	\$103,800	119,700	199,040	--	132,867	--
FTE	2,500	2,793	--	2,793	2,793	--

Appropriation Summary Statement

Funds are received and deposited in trust from States, counties, timber sale operators, individuals, associations, and others. These funds are expended by the Forest Service as authorized by law and the terms of the applicable trust agreements. The work consists of protection and improvement of the National Forest System, work performed for the National Forest users, research investigations, reforestation, and administration of private forest lands.

Authorities: Various Public Laws including the Act of June 30, 1914 (Cooperative Funds Act), as amended and (7 U.S.C. 2269; 16 U.S.C. 498, 572, 537, 572a, and 1643a). Cooperative work (trust fund) for other activities-investigation, protection and improvement of National Forests
(05-96) 12-8028 302 SAGR HAGR

P.L. 71-319, Act of June 9, 1930 (Knutson-Vandenberg Act) as amended (16 U.S.C. 576b)

Section 3

Funds deposited by timber sale purchasers to cover the cost of reforestation and special cultural measures to improve the future stands of timber on areas cutover by the purchaser.

(05-96) 12-8028-302 SAGR/HAGR
No expiration date.

Cooperative Work, Knutson-Vandenberg

Objective: To improve the future productivity of the renewable resources on timber sale areas.

Program description: Fund deposits by timber sale purchasers are used primarily for reforestation and timber stand improvement. Accomplishments under this program are reported under the National Forest System appropriation within the applicable activity.

Reforestation K-V

Objective: To reforest timber sale areas and ensure the orderly development of timber production on National Forest System land.

Program description: The Knutson-Vandenberg Law (K-V) as amended, provides that a portion of timber sale receipts may be used for needed reforestation work on timber sale areas. Funds to accomplish work are deposited into a Trust Fund.

About 55 percent of the total reforestation work needed is expected to be funded from K-V during the next few years.

Increase for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Reforestation-K-V \$	82,780	84,350	+1,570
FTE	1,435	1,435	—

The \$84,350,000 in the proposed budget level will be used to accomplish 215,000 acres of reforestation. The increase is anticipated as a result of increased harvesting. This budget level will provide an increase of \$1,570,000 for the reforestation of these acres at an average cost of \$392 per acre. This compares to the \$379 per acre figure for 1983 and \$391 per acre in 1982.

Object class information:

Supplies, materials and equipment	+294
Land and structures	+93
Other contractual services	+1,183
Total	+1,570

Timber Stand Improvement K-V

Objective: To improve timber growth and product quality on timber sale areas by thinning and release treatments of the residual stands.

Program description: The Knutson-Vandenberg Law (K-V) as amended, provides that a portion of timber sale receipts may be used for timber stand improvement work. This work is financed from a trust fund in the same manner of financing as is provided for reforestation.

Increase for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Timber Stand Improvement (KV).....\$	25,450	26,850	+1,400
FTE	435	435	—

The budget level of \$26,850,000 for the K-V stand improvement program will be used to treat 142,000 acres resulting from increased harvesting. The budget level will provide an increase of \$1,350,000 for increased costs of accomplishing the 142,000 acres. Average cost per acre estimated for the 1984 program is \$139 per acre as compared to \$175 per acre in 1983 and \$123 per acre in 1982.

Most of the 142,000 acres of stand improvement work will be contracted for the release of plantations.

Object class information:

Supplies, materials and equipment	+318
Land and structures	+100
Other contractual services	+982
 Total	 +1,400

Other K-V

Objective: To protect and improve all other resource values on timber sale areas in conjunction with timber improvement activities.

Program description: The Knutson-Vandenberg Law (K-V) as amended, provides that a portion of timber sale receipts may be used for protecting and improving the future productivity of the renewable resources of the forest land on sale areas including sale area improvements, maintenance and construction and wildlife habitat improvements.

Timber sales sold since the Act was amended (1976) are now being harvested and collections for other resource work on timber sale areas have increased. Emphasis will be on stream channel restoration and enhancement for resident and anadromous fish and habitat improvement for game and non-game species in accordance with approved State Comprehensive Plans. Watershed improvements will be designed to maintain or improve soil productivity and water quality.

Decrease for 1984:

	<u>1984</u> <u>Base</u>	<u>1984</u> <u>Estimate</u>	<u>Decrease</u>
Other KV.....\$	10,925	6,800	-4,125

The decrease of \$4,125,000 in 1984 does not represent a program decrease. The 1984 program will reflect an activity in line with the 1982 actual expenditures of \$6,218,000. The expected expenditures in 1983 will also be about \$6,500,000, rather than the estimate in the 1983 President's Budget.

Object class information:

Supplies, materials and equipment.....	-1,016
Other contractual services	-2,776
Communication, utilities and other rents	-333
 Total	 -4,125

Cooperative Work, Other

Objective: Deposits received from cooperators are used for research investigations and for protection and improvement of the National Forest System as authorized by the trust agreement.

Program descriptions:

1. Construction and Maintenance of Roads, Trails and Other Improvements. Under the Acts of June 30, 1914 (16 U.S.C. 498), March 3, 1925, April 24, 1950 (16 U.S.C. 572) and October 13, 1964 (16 U.S.C. 537), deposits for cooperative work are accepted from State and local government agencies, associations, Federal timber purchasers, users of roads, and others. These deposits are used for the construction and reconstruction maintenance of roads, trails, and other improvements. Deposits received for wildlife habitat improvement for States from their hunting and fishing fees are included in this activity.
2. Protection of National Forest and Adjacent non-Federal Lands. The Act of June 30, 1914 (16 U.S.C. 498), authorizes the acceptance of contributions for the protection of the National Forests and the Act of March 3, 1925, as amended by Section 5 of the Act of April 24, 1950 (16 U.S.C. 572), authorizes the acceptance of deposits for the protection of non-Federal lands in or near the National Forests. The arrangement for the protection of private lands from fire helps both parties since there are millions of acres of non-Federal forest land intermingled with Federal ownership on the National Forests. The lands in non-Federal ownership are usually in small tracts. It would be uneconomical for the owner to set up a fire control organization for the protection of his land. The advantage to the Government is a cost savings since in many cases it would be necessary to suppress the fires on the non-Federal land anyway without reimbursement in order to protect the adjoining Federal land.
3. Scaling. Under provisions of the Act of April 24, 1950 (16 U.S.C. 572 and of Section 210 of the Act of September 21, 1944 (16 U.S.C. 572a), acceptance of deposits from timber purchasers for scaling services is authorized. Such arrangements are established only when requested by the operator and when the operator pays the extra cost of such services, either in advance or through reimbursement under appropriate payment guarantees.
4. Research Investigations. The Act of June 30, 1914 (16 U.S.C. 498), and the Act of June 30, 1978 (16 U.S.C. 1643) cited as the Forest and Rangeland Renewable Resources Research Act of 1978, authorizes the acceptance of deposits for forestry research. Deposits are received from State and other public agencies, and from industrial, association and other private agencies to finance research projects of mutual interest and benefit to both parties. The deposits may be made either in a single sum or on a continuing basis, and may either partially or wholly cover the cost of the research. The cooperative research projects may involve any aspect of forestry and vary widely as to scope and duration.
5. Administration of non-Federal Lands. The Act of March 3, 1925, as amended by Section 5 of the Act of April 24, 1950 (16 U.S.C. 572), authorizes the acceptance of deposits for the administration of non-Federal lands. These deposits are made by non-Federal owners having land intermingled with or adjacent to National Forests who wish these lands managed in accordance with good forest management practices. Their holdings are usually too small to warrant the employment of professional foresters to administer such tracts. The advantages to the Government include the avoidance of possible high fire hazard areas resulting from improper cutting practices, the elimination of the necessity of precisely marking the boundaries of the private land and additional private forest land handled under proper forest practices.

6. Reforestation (private lands). The Act of March 3, 1925, as amended by Section 5 of the Act of April 24, 1950 (16 U.S.C. 572), authorizes the acceptance of deposits for reforestation of non-federal lands situated within or near a National Forest. This work is limited to areas of non-Federal land within a planting project on the National Forests or to areas in which certain civic and other public-spirited organizations have taken an interest.

In addition to the specific programs described above, Section 5c of the Granger-Thye Act of April 24, 1950 (16 U.S.C. 572) authorizes performance of various kinds of work by the Forest Service on a reimbursable basis: provided, that (1) it has been administratively determined to be advantageous to the Government and (2) necessary precautions have been taken to insure the recovery of all costs involved, including adequate payment bond or other acceptable surety and (3) when so provided by written agreement such amounts are reimbursed to any appropriation to the Forest Service available for similar types of work (42 CG 376).

Increase for 1984:

	<u>1984 Base</u>	<u>1984 Estimate</u>	<u>Increase</u>
Cooperative Work, Other..... \$	31,200	32,000	+800
FTE	743	743	--

This increase of \$800,000 over the base reflects the expected increase in cooperative deposits by timber purchasers for road maintenance.

Object class information:

Supplies, materials and equipment	+150
Transportation of things.....	+20
Other contractual services	+630
Total	+800

REFORESTATION TRUST FUND

Appropriation Summary Statement

The establishment of a trust fund to be used for reforestation and timber stand improvement when annual appropriated funds are unavailable to meet total needs of fiscal year programs.

Authorities:

P.L. 96-451, Act of October 14, 1980, as amended: (16 U.S.C. 1606 a(d) and (e).
Section 303

Establishment of Reforestation Trust Fund to be held by the Secretary of Treasury. Funds to be invested and provided to the Secretary of Agriculture based on an estimated fiscal year need, necessary to accomplish the reforestation and treatment of acreage program.

Authorization: \$30,000,000 annually, available until expended. (Permanent indefinite)

Objective: To assure that the reforestation and timber stand improvement program is maintained at a level that will eliminate existing reforestation backlog by 1985.

Program Description: Necessary funds are to be used to accomplish the reforestation and timber stand improvement program as described in the reforestation and stand improvement section of the National Forest System Appropriation.

The following table summarizes planned activity through 1984:

	<u>1982</u>	<u>1983</u>	<u>1984</u>
	(Dollars in thousands)		
Start of year balance	\$ 68,618	106,439	31,306
Revenue	<u>37,821</u>	<u>34,000*</u>	<u>31,400*</u>
Total Available	\$ 106,439	140,439	62,706
Planned expenditures/outlays	\$ -0-	-109,133	-62,706
Reforestation/Stand Improvement Program	\$ --	(108,035)	(-61,896)
Treasury outlay 1/	<u>\$ --</u>	<u>(-1,098)</u>	<u>(-810)</u>
End of year balance	\$ 106,439	\$ 31,306	\$ -0-

* Estimated

1/ Represents the reduction in interest earnings from securities redeemed.
(Net value of discounted vs. premiums earned.)

The Highway Improvement Act of 1982 activated this fund in FY 1983. Funds appropriated in 1983 for Reforestation and Stand Improvement (\$108,035,000) is planned for deferral. An equal amount of Reforestation Trust Fund monies will be used for the Reforestation Stand Improvement Program. The appropriation deferral will finance 1984 programs for Cooperative law Enforcement, Road and Trail Maintenance and \$30,538,000 of Reforestation and Stand Improvement. The balance of the 1984 Reforestation & Stand Improvement Program will be financed from this trust fund in the amount of \$61,896,000.

MISCELLANEOUS TRUST FUNDS

Program and Financing (in thousands of dollars)

Identification code	12-9973-0-7-302	1982 actual	1983 est	1984 est
Program by activities:				
Direct program:				
	Construction and maintenance of roads and trails	17,597	18,300	19,030
	Construction and maintenance of other improvements.....	1,519	1,580	1,640
	Protection of national forest and adjacent private land.....	6,994	7,270	7,560
	Sale area betterment and scaling	84,558	120,500	130,750
	Research investigations.....	1,117	1,160	1,210
	Administration.....	56	60	60
	Reforestation.....	64	70	70
	Gifts and donations.....	26	90	90
10.00	Total obligations.....	111,931	149,030	160,410
Financing:				
Offsetting collections from:				
11.00	Federal funds: Revenue.....	-9		
14.00	Non-Federal sources.....	42		
Unobligated balance available, start of year:				
21.40	Treasury balance.....	-289,225	-282,133	-279,723
21.40	U.S. securities (par).....	-180	-145	-125
Unobligated balance available, end of year:				
24.40	Treasury balance.....	282,133	279,723	269,403
24.40	U.S. securities (par).....	145	125	35
60.00	Budget authority (appropriation) (permanent, indefinite).....	104,804	146,600	150,000
Relation of obligations to outlays:				
71.00	Obligations incurred, net	111,932	149,030	160,410
72.40	Obligated balance, start of year	22,678	21,884	42,289
74.40	Obligated balance, end of year	-21,884	-42,289	-52,835
90.00	Outlays.....	112,726	128,625	149,864

MISCELLANEOUS TRUST FUNDS

Object Classification (in thousands of dollars)

Identification code	12-9973-0-7-302	1982 actual	1983 est	1984 est
Personnel compensation:				
11.1	Full-time permanent.....	27,470	57,242	33,800
11.3	Other than full-time permanent	15,380	12,800	24,300
11.5	Other personnel compensation	2,171	2,890	3,110
11.8	Special personal services payments	44	60	65
11.9	Total personnel compensation	45,065	72,992	61,275
12.1	Personnel benefits: Civilian.....	6,881	9,162	9,860
13.0	Benefits for former personnel	1,556	2,072	2,230
21.0	Travel and transportation of persons	1,026	1,336	1,470
22.0	Transportation of things	1,106	1,473	1,585
23.1	Standard level user charges	411	547	590
23.2	Communications, utilities, and other rent	4,601	6,126	6,590
24.0	Printing and reproduction	130	173	185
25.0	Other services	34,122	32,470	49,225
26.0	Supplies and materials	10,779	14,352	17,450
31.0	Equipment	1,071	1,426	1,530
32.0	Lands and structures.....	4,519	6,017	7,475
41.0	Grants, subsidies, and contributions	25	33	35
42.0	Insurance claims and indemnities	71	95	100
44.0	Refunds	568	756	810
99.9	Total obligations	111,931	149,030	160,410

Personnel Summary

Total number of full-time permanent positions	1,315	2,700	1,527
Total compensable workyears:			
Full-time equivalent employment	2,429	2,793	2,793
Full-time equivalent of overtime and holiday hours	105	136	141
Average ES salary	\$58,500	\$61,122	\$61,122
Average GS grade	9.10	9.10	9.10
Average GS salary	\$20,460	\$21,280	\$22,130
Average salary of ungraded positions	\$21,030	\$21,870	\$22,745

REFORESTATION TRUST FUND

Amounts Available for Appropriation (in thousands of dollars)

	1982 actual	1983 est	1984 est
Unappropriated balance, start of year	68,618	106,439	.....
Revenue	37,821	34,000	31,400
Total available for appropriation	106,439	140,439	31,400
Appropriation: Reforestation trust fund .....	.....	140,439	31,400
Unappropriated balance, end of year	106,439	.....	.....

Program and Financing (in thousands of dollars)

Identification code	20-8046-0-7-302	1982 actual	1983 est	1984 est
10.00	Obligations	1,098	109,133	62,706
21.40	Unobligated balance, start of year .....	.....	.....	— 31,306
24.40	Unobligated balance available, end of year ..	.....	31,306	.....
60.00	Budget authority (appropriation) (permanent)	1,098	140,439	31,400
Relations of obligations to outlays:				
71.00	Obligations incurred, net	1,098	109,133	62,706
72.40	Obligated balance, start of year .....	.....	.....	.....
74.40	Obligated balance, end of year .....	.....	.....	.....
90.00	Outlays	1,098	109,133	62,706

Object Classification (in thousands of dollars)

Identification code	20-8046-0-7-302	1982 actual	1983 est	1984 est
Direct obligations:				
25.0	Other services .....	.....	108,035	61,608
33.0	Investments and loans	1,098	1,098	1,098
99.9	Total obligations	1,098	109,133	62,706

HUMAN RESOURCE PROGRAMS

Objective: To provide human and natural resource benefits through administering and hosting programs in work, training and education for the unemployed, the underemployed, the elderly, the young and others with special needs.

Program description: The Forest Service participates in cooperative employment programs such as those authorized by the Job Training Partnership Act of 1982 (P.L. 97-300), the Youth Conservation Corps Act of 1970 (P.L. 91-378) as amended, the Older Americans Act of 1965 (P.L. 89-73) as amended, and programs for improvement of living conditions in communities and rural areas through technical forestry assistance. Over 72,000 people are expected to participate in the Forest Service administered employment and volunteer programs during fiscal year 1984.

Tables 1a - 1c display a summary of Forest Service actual or planned involvement in Human Resource Programs in 1982 through 1984.

Tables 2a - 2c display the actual or estimated work accomplishments for selected activities by Human Resource Programs in 1982 through 1984.

Job Corps

Under the provisions of the Job Training Partnership Act of 1982, in agreement with the Department of Labor, the Forest Service operates 18 Job Corps Civilian Conservation Centers providing basic education and job training to disadvantaged youth. About 8,700 young men and women participated in fiscal year 1982. A minimal decrease in participation is expected in the FY 1984 program. During fiscal year 1982, 84 percent of Job Corps graduates were placed in jobs, the military, or in school. In addition to acquiring job skills, Job Corps participants accomplished work valued at \$15.3 million in fiscal year 1982.

Youth Conservation Corps

The Youth Conservation Corps (YCC) is a summer employment program for young men and women, age 15 through 18, who work, learn and earn together by doing projects that further the development and conservation of natural resources.

For fiscal year 1982, the Forest Service of the Department of Agriculture, the Fish and Wildlife Service and the National Park Service of the Department of the Interior were authorized under the provisions of Public Law 93-408, the YCC Act, and Public Law 97-100, Interior and Related Agencies Appropriation Act, to utilize up to \$3 million, but not less than \$1 million, for high priority projects within the scope of their approved budget to be carried out by the YCC program.

The Forest Service operated a \$1.6 million program serving 1,006 young people. Of the participants, 17 percent were minorities and 43 percent were women. They accomplished 164 person-years of work valued at \$1.9 million with a return of \$1.18 on every dollar spent. For fiscal year 1983, about 2,150 young people are expected to participate in a \$3.4 million program. Conservation work valued at about \$4.0 million will be carried out. No YCC program is proposed for fiscal year 1984.

Senior Community Service Employment Program

The Forest Service, in cooperation with the Department of Labor, sponsors the Senior Community Service Employment Program (SCSEP), which is authorized under Title V of the Older Americans Act. The SCSEP has three fundamental purposes: (1) community service to the public, (2) part-time employment and supplemental income, and (3) training and transition of participants to the private sector labor market. The program employs economically disadvantaged persons 55 and older and seeks to foster a renewed sense of self-worth and community involvement among traditionally poor and hard-to-employ older individuals.

The Forest Service's interagency agreement for July 1, 1981 to June 30, 1982, provided \$16.2 million which employed 4,288 persons (19 percent minorities and 31 percent women). Participants accomplished 2,132 person-years of work valued at \$22.8 million. This meant the Government realized a return of \$1.41 for each dollar invested. During the July 1, 1982 through June 30, 1983 program, it is anticipated that 4,600 seniors will be employed with funding of \$16.8 million. For the period July 1, 1983 through June 30, 1984, funding and employment are projected to increase minimally from the previous year's level.

Volunteers in the National Forests

The Volunteers in the National Forests Act of 1972 as amended, provides for assistance in the protection and development of natural resources at nominal costs. In fiscal year 1984, 50,000 volunteers are expected to contribute \$22 million worth of conservation work. This compares with over \$15 million worth of work contributed by 42,570 volunteers in fiscal year 1982.

Hosted Programs

The Forest Service also serves as a host agency by providing work opportunities for programs administered by State and local governments. In fiscal year 1984, about 800 person-years of work valued at \$9 million are expected from 7,000 people participating in hosting arrangements. The fiscal year 1982 accomplishment was 723 person-years of work, worth \$7.8 million carried out by 8,014 participants.

Table 1a

**SUMMARY OF HUMAN RESOURCE PROGRAMS
PROJECTED FISCAL YEAR 1982**

Program	Program Funding (Million Dollars)	Value of Work Accomplished	Number of Persons Served	Percent Women	Percent Minority	Person- Years Accom- plished	Dollar Invest- ment Return
Youth Conser- vation Corps	\$ 1.6	\$ 1.9	1,006	43	17	164	\$1.18
Young Adult Con- servation Corps <u>1/</u>	20.3	25.2	8,555	33	27	2,878	1.25
Job Corps	53.3	15.3	8,780	8	59	3,676	--
Senior Community Service Employment Program <u>2/</u>	16.2	22.8	4,288	31	19	2,132	1.41
Volunteers in the National Forests	Unfunded	15.0	42,570	31	12	1,238	--
Hosted Programs	<u>Unfunded</u>	<u>7.8</u>	<u>8,014</u>	<u>27</u>	<u>32</u>	<u>723</u>	<u>--</u>
TOTAL	\$91.4	\$ 88.0	73,213	--	--	10,811	--

1/ Figures reflect only the Forest Service portion of the program. An additional \$37.3 million is in the Department of the Interior and State Grant programs for YACC.

2/ The SCSEP (Title V of the Older Americans Act) statistics are for the July 1, 1981 - June 30, 1982 program year.

Table 1b

**SUMMARY OF HUMAN RESOURCE PROGRAMS
PROJECTED FISCAL YEAR 1983**

Program	Program Funding (Million Dollars)	Value of Work Accomplished	Number of Persons Served	Percent		Person- Years Accom- plished	Dollar Invest- ment Return
				Women	Minority		
Youth Conser- vation Corps	\$ 3.4	\$ 4.0	2,150	45	20	350	\$1.18
Young Adult Con- servation Corps <u>1/</u>	--	--	--	--	--	--	--
Job Corps	54.4	15.7	8,500	8.5	62	3,866	--
Senior Community Service Employment Program <u>2/</u>	16.8	24.0	4,600	32	20	2,250	1.43
Volunteers in the National Forests	Unfunded	18.0	46,000	40	20	1,600	--
Hosted Programs	<u>Unfunded</u>	<u>7.6</u>	<u>5,000</u>	<u>40</u>	<u>32</u>	<u>600</u>	<u>--</u>
TOTAL	\$74.6	\$ 69.3	66,250	--	--	8,666	--

1/ The authorization for YACC expired September 30, 1982.

2/ Projections are for the program period July 1, 1982 - June 30, 1983.

Table 1c

SUMMARY OF HUMAN RESOURCE PROGRAMS
PROJECTED FISCAL YEAR 1984

Program	Program Funding (Million Dollars)	Value of Work Accomplished	Number of Persons Served	Percent		Person- Years Accom- plished	Dollar Invest- ment Return
				Women	Minority		
Youth Conser- vation Corps <u>1/</u>	--	--	--	--	--	--	--
Job Corps	\$55.1	\$ 16.0	8,000	9	64	3,866	--
Senior Community Service Employment Program <u>2/</u>	17.2	24.9	4,700	33	21	2,325	\$1.45
Volunteers in the National Forests	Unfunded	22.0	50,000	40	20	2,000	--
Hosted Programs	<u>Unfunded</u>	<u>9.0</u>	<u>7,000</u>	<u>40</u>	<u>31</u>	<u>800</u>	<u>--</u>
TOTAL	\$72.3	\$71.9	69,700	--	--	8,991	--

1/ A YCC Program is not proposed for 1984.

2/ Projections are for the program period of July 1, 1983 - June 30, 1984.

Table 2a

Work Accomplishment by Human Resource Programs
for Selected Activities

1982 Actual

Activities and Unit of Measure	VOLUNTEERS	YACC	YCC	SCSEP	OTHER	TOTAL
Recreation Construction and Rehabilitation (PAOT)	3,400	4,005	-0-	1,206	361	8,972
Recreation Management (PAOT days)	1,402,676	3,668,296	206,973	5,125,162	727,330	11,130,437
Fish and Wildlife Habitat Improvement (Acres equiv.)	10,041	41,240	2,291	4,460	21,767	79,799
Range Management (Acres)	12,111	138,052	937	32,037	16,854	199,991
Reforestation (Acres)	461	3,027	1,019	680	970	6,157
Timber Stand Improvement (Acres)	32	6,918	1,989	660	2,003	11,602
Water and Soil Resource Improvement (Acres)	717	386	4	33	2,654	3,794
Property Boundary Location (Miles)	12	56	2	10	81	161
Trail Construction and Re- construction (Miles)	175	123	37	3	79	417
Fuel Treatment Management (Acres)	127	4,785	202	277	1,526	6,917

Table 2b

Work Accomplishment by Human Resource Programs
for Selected Activities

1983 Estimate

Activities and Unit of Measure	VOLUNTEERS	YCC	SCSEP	OTHER	TOTAL
Recreation Construction and Rehabilitation (PAOT)	4,400	-0-	1,300	300	6,000
Recreation Management (PAOT days)	1,800,000	450,000	5,500,000	600,000	8,350,000
Fish and Wildlife Habitat Improvement (Acres equiv.)	13,000	5,000	4,700	18,000	40,700
Range Management (Acres)	15,600	2,000	34,000	14,000	65,600
Reforestation (Acres)	600	2,200	720	800	4,320
Timber Stand Improvement (Acres)	40	4,300	700	1,660	6,700
Water and Soil Resource Improvement (Acres)	900	10	35	2,200	3,145
Property Boundary Location (Miles)	15	4	11	70	100
Trail Construction and Re- construction (Miles)	225	80	3	65	373
Fuel Treatment Management (Acres)	160	440	290	1,300	2,190

Table 2c

Work Accomplishment by Human Resource Programs
for Selected Activities

1984 Estimate

Activities and Unit of Measure	VOLUNTEERS	YCC ^{1/}	SCSEP	OTHER	TOTAL
Recreation Construction and Rehabilitation (PAOT)	5,500	--	1,300	400	7,200
Recreation Management (PAOT days)	2,300,000	--	5,600,000	800,000	8,700,000
Fish and Wildlife Habitat Improvement (Acres equiv)	16,000	--	4,800	24,000	44,800
Range Management (Acres)	20,000	--	35,000	18,700	73,700
Reforestation (Acres)	750	--	740	1,100	2,590
Timber Stand Improvement (Acres)	50	--	720	2,200	2,970
Water and Soil Resource Improvement (Acres)	1,160	--	40	3,000	4,200
Property Boundary Location (Miles)	20	--	10	90	120
Trail Construction and Re- construction (Miles)	280	--	3	85	368
Fuel Treatment Management (Acres)	200	--	300	1,700	2,200

^{1/} A YCC program is not proposed for 1984.

JUSTIFICATION FOR CHANGE IN LANGUAGE

Proposed change in language:

STATE AND PRIVATE FORESTRY

For necessary expenses of cooperating with, and providing technical and financial assistance to States, Territories, possessions, and others; and for forest pest management activities, \$25,058,000 [of which] to remain available for obligation until September 30, 1985, to carry out activities authorized in Public Law 95-313 [: Provided, that a grant of \$3,000,000 shall be made to the State of Minnesota for the purpose authorized by section 6 of Public Law 95-495].

This change is proposed to bring appropriation language into agreement with the 1984 request which proposes to eliminate the forest intensification program along with most other cooperative forestry grant programs.

Proposed change in language:

NATIONAL FOREST SYSTEM

For necessary expenses of the Forest Service, not otherwise provided for, for management, protection, improvement, and utilization of the National Forest System, and for liquidation of obligations incurred in the preceding fiscal year for forest fire protection and emergency rehabilitation, including administrative expenses associated with the management of funds provided under the heads "Forest Research", "State and Private Forestry", "National Forest System", and "Construction" and "Land Acquisition", \$872,841,000 and \$108,035,000 from funds appropriated and deferred in FY 1983 (Public Law 97-354) which are hereby made available [for reforestation, timber stand improvement, cooperative law enforcement, and maintenance of forest development roads and trails shall remain available for obligation until September 30, 1984].

This change eliminates the 2 year accounts from 1984. These accounts will be financed from the proposed 1983 deferral of \$108,035,00 as follows:

Cooperative Law Enforcement	\$ 5,171,000
Road Maintenance	64,164,000
Trail Maintenance	8,162,000
Reforestation and Timber Stand Improvement	30,538,000
	<u>\$108,035,000</u>

The balance of the reforestation and timber stand improvement program (\$61,896,000) will be financed from the Reforestation Trust Fund.

Proposed change in language:

CONSTRUCTION

For necessary expenses of the Forest Service, not otherwise provided for, for construction \$242,291,000 to remain available until expended, of which \$26,316,000 is for construction and acquisition of buildings and other facilities; and \$223,832,000 is for construction of forest roads and trails by the Forest Service as authorized by 16 U.S.C. 532-538 and 23 U.S.C. 101 and 205 [;and \$9,000,000, to remain available until expended, for final payment, subject to the execution of a final agreement between the Secretary of the Interior, the Secretary of Agriculture, and the Chugach Natives, Incorporated, for the final settlement of land claims of the Chugach Natives, Incorporated, as authorized by section 1302(h) and section 1430 of the Alaska National Interest Lands Conservation Act (Public Law 96-487) and section 22(f) of the Alaska Native Claims Settlement Act, as amended (Public Law 94-204): Provided, That funds becoming available under the Act of March 4, 1913 (16 U.S.C. 501, 16 U.S.C. 532-538 and 23 U.S.C. 101 and 205) shall be transferred to the General Fund of the Treasury of the United States. Provided further, that no more than \$291,300,000 to remain available without fiscal year limitation, shall be obligated for the construction of forest roads by timber purchasers.

This change removes specific language covering the final payment to Chugach Natives, Incorporated which is not included in the proposed 1984 appropriation.

Proposed change in language:

LAND ACQUISITION

For expenses necessary to carry out the provisions of the Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 460 -4-11), including administrative expenses, and for acquisition of land or waters, or interest therein, in accordance with statutory authority applicable to the Forest Service, \$10,070,000 to be derived from the Land and Water Conservation Fund, to remain available until expended [: Provided, That the unexpended balance of funds appropriated to the Forest Service in Heritage Conservation and Recreation Service "Land and Water Conservation Fund" shall be merged with this appropriation].

This change removes language that applied to unexpended balances available at the end of fiscal year 1982. These balances have been merged with this appropriation and appropriation language does not need to be repeated in 1984.

Proposed change in language:

[YOUTH CONSERVATION CORPS]

[There is appropriated \$10,000,000, of which \$3,400,000 is hereby transferred to "National Forest System", \$3,300,000 is hereby transferred to "Operation of the National Park System", National Park Service, and \$3,300,000 is hereby transferred to "Resource Management", United States Fish and Wildlife Service, for high priority projects which shall be carried out as if authorized by Public Law 93-408.]

This change removes the Youth Conservation Corps appropriation language. A Youth Conservation Corps program is not proposed for 1984.

Proposed changes in Administrative Provisions:

1. Delete the following provision:

None of the funds available under this Act shall be obligated or expended to change the boundaries of any region, to abolish any region, to move or close any regional office for research, State and private forestry, and National Forest System administration of the Forest Service, Department of Agriculture, without the consent of the House and Senate Committees on Appropriations and the Committee on Agriculture, Nutrition, and Forestry in the U.S. Senate and the Committee on Agriculture in the U.S. House of Representatives.

This change removes language that restricts the flexibility needed to make changes to improve organization effectiveness and efficiency. The Forest Service will continue to consult with the Appropriations Committees, Committees on Agriculture, Nutrition and Forestry, and individual members of Congress concerned, prior to effecting any such change.

2. Delete the following provision:

None of the funds made available under this Act shall be obligated or expended to adjust annual recreational residence fees to an amount greater than that annual fee in effect at the time of the next to last fee adjustment, plus 50 per centum. In those cases where the currently applicable annual recreational residence fee exceeds that adjusted amount, the Forest Service shall credit to the permittee that excess amount, times the number of years that that fee has been in effect, to offset future fees owed to the Forest Service.

This change is proposed for the following reasons:

1. The provision is in conflict with the Independent Offices Appropriation Act of 1952 (5 U.S.C. 140) which directs collection of fees based on "fair market value" and has been the basis for fee pricing government-wide for the past 30 years. The Federal Land Policy and Management Act of 1976 also explicitly requires fair market value pricing (43 U.S.C. 1701).
2. A reduced fee would create a large lease-hold interest. The value of the permit would be substantially increased when selling the residence.
3. The Forest Service administers over 16,000 recreation residence permits. Credits would be necessary for most permits adjusted over the last 5-10 years. Some permits have not been adjusted for the last 10 years and credits may be required for up to 20 years for such permits.
4. The provision creates an inconsistency in fee pricing between the Forest Service and the Bureau of Land Management. BLM is using a fair market value system (as required by the Federal Land Policy and Management Act of 1976) while the Forest Service will be under this provision.

The Forest Service is reviewing the premise of fair market value as requested by the House Appropriations Committee and will propose other approaches for recreation residence fee adjustments. During 1983 fee redeterminations will be made as scheduled and adjustments will be made where the new fee will meet the requirements of the Act. Credits, if any will be applied to billing for 1984.

3. Delete the following provision:

The appropriation structure for the Forest Service may not be altered without advance approval of the House and Senate Committees on Appropriations.

This change recognizes that the Forest Service has no authority to change the appropriation structure. The House and Senate Committees on Appropriations will continue to be consulted prior to submitting proposed changes.

4. Delete the following provision:

No funds appropriated to the Forest Service shall be transferred to the Working Capital Fund of the Department of Agriculture without the approval of the Chief of the Forest Service.

This change is proposed to eliminate a requirement that intrudes in the working relationships of the Forest Service and the Department of Agriculture. Funding responsibility for the Department's Working Capital Fund is determined by rational formulas and each agency in the Department must pay its fair share of the Fund.

✓ Budget (cont.) 11/5/00
subd. "Appropriation"
exp. to
under exp. to